

To whom it may concern:

9/14/15

BLM - Utah State Office

440 W. 200 South, Suite 500  
Salt Lake City, UT 84101

BLM - UT - 968

2015 SEP 16 PM 12:59

Please see the enclosed documents as my informal public protest of the proposed parcel list in November 2015. It's informal but specific.

These documents are related to my family history, and the fact the BLM is proposing to sell or lease land that the BLM has no right to sell. My ancestors do not approve of these activities, and I think the methods and tactics used to decimate these lands has gone on long enough, and I am writing today to let the Utah BLM, as well as the Director of the BLM and the Department of Interior, that they have rogue employees who have committed the most heinous crimes to get to this point.

Questions need to be asked about what the intentions are of the forces behind these acts, and why they have gone on so long. Please make this letter and the ~~the~~ pages public.  
-Michaela Hsieh

*Sept 16th deadline*

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## BLM posts proposed parcel list for November lease sale

Written by or for St. George News on August 18, 2015 in Government, Local, News - No comments

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**SALT LAKE CITY** — The Bureau of Land Management Utah posted Monday the list of parcels proposed for auction at the quarterly competitive oil and gas lease sale scheduled for Nov. 17 in Salt Lake City. Posting initiates a 30-day public protest period.

The list includes 55 proposed parcels covering 73,195 acres in the Price, Vernal and Fillmore field offices and the Fishlake National Forest.

The Price Field Office contains 32 parcels covering 55,286 acres, the Vernal Field Office has 10 parcels covering 3,313 acres, the Fillmore Field Office has nine parcels covering 12,943 acres and the Fishlake National Forest has four parcels covering 1,653 acres.

All 55 parcels are identified as available to oil and gas leasing under the current resource management plans for the Price, Vernal and Fillmore offices and the Fishlake National Forest.

All protests must be received no later than **4:30 p.m. on Sept. 16. Protests should be as specific as possible.** Those that contain only opinions or preferences will not receive a formal response but may be considered in the BLM decision-making process.

Protests may be mailed to the BLM-Utah State Office at 440 W. 200 South, Suite 500, Salt Lake City, UT 84101, or faxed to the attention of Becky Hammond at 801-539-4237.

For information on how to file a timely protest, please refer to the November 2015 Notice of Competitive Lease Sale, which can be accessed online.

Hard copies of the sale notice may also be obtained in person from the BLM-Utah State Office Public Room at the address listed above.

Before including an address, phone number, email address, or other personal identifying information in any comments, be aware that the entire comment — including personal identifying information — may be made publicly available at any

*Connected to Vernal Road Aug 26th deadline*

time. Requests to withhold personal identifying information from public review can be submitted, but the BLM cannot guarantee that it will be able to do so.

The competitive oral auction will take place at the BLM-Utah State Office. The sale room opens at 7:45 a.m. to allow potential bidders to register and obtain a bidder number. The competitive oral auction will begin at 9 a.m.

For additional information about oil and gas leasing in Utah, please contact Becky Hammond at 801-539-4039. Persons who use a telecommunications device for the deaf may call the Federal Information Relay Service at 1-800-877-8339 to leave a message or question with the above individual. The FIRS is available 24 hours a day, seven days a week. Replies are provided during normal business hours.

**Related posts**

- BLM seeks comment on increasing San Juan County ramping fees
- BLM seeks public comment on geothermal exploration project
- BLM seeks public comment on proposed mine plan modification

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**About the Author**



Meghan Belaski Ashe  
1212 Southridge Dr.  
Fort Collins, CO 80521

May 22, 2015

U.S. Department of the Interior  
Bureau of Land Management  
Ely District Office  
Caliente Field Office  
P.O. Box 237, Caliente, NV 89008  
Attn: 2015 Oil & Gas Lease Sale

Dear Carisa Shilling and Chris Hanefeld,

I am writing today in response to the open public comment period that ends today, May 22, 2015, regarding the 2015 Oil & Gas Lease Sale in White Pine County, Nevada, through the BLM. At this time I would ask you to postpone or rescind the proposed lease sale in White Pine County due to the fact the Great Basin National Park lies within the boundaries of White Pine County, Nevada, is an endorheic or closed basin, so the watershed is both delicate and wild at the same time, and cannot afford the disruptions, pollution and contamination that occurs from oil and gas development, as well as in-situ uranium mining, atop of endorheic basins in places like White Pine County, Nevada.

The BLM should also be aware of the fact that their General Land Office Records for the BLM indicate that many White Pine County, Nevada, patents have not been checked against the Legal Land Patent records which are maintained by the National Archives and Records Administration in Washington, DC. Because I was in Washington, DC, last summer, I was able to look through a few tract books for White Pine County, Nevada, and found that a special exemption had been issued for White Pine County, Nevada, by the federal government, and seemed to indicate it was the only county in all of Nevada that had been issued this exemption.

The exemption was issued by the United States around the same time many of the reported clashes with the Native American Tribes and Mormon Pioneers in Utah and Nevada occurred, and some of those occurred around what is now the Great Basin National Park. The Legal Land Patent records should be verified further for accuracy due to the cultural and historic significance of the area that will most certainly be lost on the last wild landscape of the west to oil and gas development, and pollute the delicate basin as well.

Lastly, I would like to convey that Mary Tilford, one of the daughters of John and Sarah Tilford, was my grandmother. John and Sarah Tilford, as well as Boone and Mary (Cherry) Tilford, were pioneers of what is now the Great Basin National Park in White Pine County, Nevada. Mary Tilford was my dad's mom, and died in 1978 when I was 2 years old. This weekend my Great Aunt Elinor will be honored at the age of 99, the last living offspring of John and Sarah, with a

dedication in the Great Basin National Park, of cabin that was re-built by the park, to recognize the contribution of the Tilford family to the area in her honor. I could not be more thrilled for her as I know it is something she has been looking forward to for several years now.

2 years ago my husband and I decided to take Highway 50 home to Colorado from California so we could pass through this place called the Great Basin I had only visited 1 time as a teen, for 1 day with my dad in the 1990's. My dad knew very little of his roots, so I knew very little of his roots, and as I've grown older, I've felt the call to know why I am the way I am, and who I come from, and the best way I figured to do that, was to climb the tree, starting with the roots. In the past 2 years I have discovered much about the family I never knew, and admittedly, have been a bit confused by some of the discoveries as well, including the fact the Tilford offspring of Sarah and John Tilford are recognized as Native Americans on Tribal Rolls, as are their children (my dad), for the California Miwok of Northern California, through John Tilford, and are also direct descendants of a band of Mormon Pioneers with the Martin Handcart Co., through Sarah Tilford, or Sarah Overson, which was in direct contrast to the recorded history of the Native Americans and Mormons in Utah and Nevada during this time, and I would respectfully request that the BLM postpone or rescind the 2015 Oil and Gas Lease Sale in White Pine County, Nevada, due to the environmental harms that will occur, and because my family deserves more time to research our history and protect the cultural, historical, and environmental treasures of this unique desert landscape. Thank you for your time and consideration.

Sincerely,

Meghan Belaski Ashe



Release Date: 07/10/15

Contacts: Matt Spangler, 202-912-7035  
Beverly Gorny, 307-775-6158

## BLM Seeks Comment on Proposed Rule to Modernize Oil and Gas Regulations

*Updated Standards Will Help Ensure States, Tribes, Taxpayers Get Fair Return*

WASHINGTON – The Bureau of Land Management (BLM) today released proposed, updated regulations to ensure accurate measurement, accountability, and royalty payments for oil and gas production from Federal and Indian leases. Aimed at preventing theft and loss of these valuable resources, the proposed rule does not impose an unreasonable financial or regulatory burden on industry or the BLM. Public comment on the rule is being sought for 60 days, through September 11, 2015.

"The proposed rule represents an important step in the BLM's modernization of its oil and gas regulations," said Assistant Secretary for Land and Minerals Management Janice M. Schneider. "These updates will help ensure that oil and gas produced from leases overseen by the BLM is properly measured, that American taxpayers receive fair value for public resources, and that Indian tribes and allottees, States and local governments receive the full royalties they are due."

The proposed rule will replace Onshore Oil and Gas Order Number 3 (Order 3), which has not been updated since 1989 and does not reflect modern industry operations or technology. Order 3 sets minimum standards for ensuring that oil and gas produced from leases overseen by the BLM are properly and securely handled. The BLM determined that updates to these standards were necessary based on its experience with oil and gas measurement in the field and the changes in technology and industry operations that have occurred since Order 3 was issued.

"The BLM's rules concerning oil and gas measurement are over 25 years old and are long overdue for an update," said BLM Director Neil Kornze. "The reasonable and commonsense updates we are proposing today represent an important step forward toward modernizing our program and will help us ensure that oil and gas sites are properly and responsibly managed."

Informed by tribal consultations and public listen sessions, the proposed rule also responds directly to recommendations from the Government Accountability Office (GAO), Interior's Office of the Inspector General, and the Interior Department's Subcommittee on Royalty Management, all of which expressed concerns about the adequacy of the BLM's existing requirements with respect to production accountability. In recent years these concerns have contributed to the Department's inclusion on the GAO's High Risk List. This rule will address many of the changes recommended by the GAO.

Specifically, the proposed rule would:

- Establish uniform procedures for designating official points for oil and gas measurement for royalty accounting purposes, known as facility measurement points, that are applicable to new and existing leases;
- Codify existing guidance related to approving commingling, i.e., the combining of production from multiple leases, unit Participating Areas (PA), Communitized Areas (CA), or fee or State properties before the point of royalty measurement.
- Establish conditions for the approval of off-lease oil and gas measurement;
- Update requirements related to the use of valve and drain seals, prohibitions on the use of meter by-passes, and reporting requirements;
- Require operators of new and existing oil and gas facilities to provide new site facility diagrams designed to help BLM meet its oversight responsibilities; and
- Require purchasers and transporters to comply with the same standards as operators with respect to records.

The proposed rule is the next step in a process that the BLM began in 2011 with tribal consultation meetings and continued in 2013 with public listening sessions on potential changes to several of its existing Onshore Orders. The public listening sessions included representatives from Indian lands, environmental groups, other Federal agencies, and the oil and gas industry. Input from the listening sessions, stakeholder outreach, as well as tribal consultation meetings that have occurred since that time, helped inform the development of the proposed rule.

The BLM oil and gas management program is one of the most important mineral leasing programs in the Federal government. The total value of production is over \$33 billion, which generates more than \$3 billion in royalty revenue annually from oil and gas leasing activities on public lands (most of which is shared with state and local governments) and nearly \$1 billion in royalty revenue from activities on tribal lands (all of which goes to tribes or individual allottees).

Domestic oil and gas production has grown each year since 2009. Combined with recent declines in oil consumption, foreign oil imports now account for less than 40 percent of the oil consumed in America – the lowest level since 1988. Given the magnitude of federal and tribal production and the BLM's statutory and management obligations, it is critically important that the BLM ensure that operators accurately measure, properly report, and account for oil and gas production on federal and Indian lands.

The proposed rule may be viewed online at: <https://www.federalregister.gov/public-inspection>.

The BLM encourages the public to participate in the process by submitting comments on the proposed rule by September 11, 2015. Submit comments through one of the following methods:

- **Federal eRulemaking Portal:** <http://www.regulations.gov>. Follow the instructions at this Web site.
- **Mail:** U.S. Department of the Interior, Director (630), Bureau of Land Management, Mail Stop 2134 LM, 1849 C Street NW, Washington, DC 20240 Attention: Regulatory Affairs.
- **Personal/messenger delivery:** Bureau of Land Management, 20 M. Street SE, Room 2134 LM, Attention: Regulatory Affairs, Washington, DC 20003.

The BLM manages more than 245 million acres of public land, the most of any Federal agency. This land, known as the National System of Public Lands, is primarily located in 12 Western states, including Alaska. The BLM also administers 700 million acres of sub-surface mineral estate throughout the nation. The BLM's mission is to manage and conserve the public lands for the use and enjoyment of present and future generations under our mandate of multiple-use and sustained yield. In Fiscal Year 2014, the BLM generated \$5.2 billion in receipts from public lands.

--BLM--



Meghan Belaski <meghanbelaski@gmail.com>

## Attention: OMB Control Number 1004-XXXX

4 messages

Meghan Belaski <meghanbelaski@gmail.com>

Tue, Jul 21, 2015 at 11:12 AM

To: oira\_docket@omb.eop.gov

 BLM 1989 Oil and Gas Updates.pdf

Good Morning,

I am writing today regarding updates to the proposed regulations to "ensure accurate measurement, accountability, and royalty payments for oil and gas production from Federal and Indian leases", with a BLM proposal release date of July 10, 2015. Please use this email, and attached documentation, as my public comment.

I certainly appreciate BLM's Director Neil Komze's personal attention to this necessary update, and would like the BLM to use my public comment to help ensure these updates are not derailed by multi-national corporations that have nothing more than self-interest invested in these lands, yet would attempt to convince the public, and most of our elected politicians, otherwise.

On May 22, 2015, I left Colorado with my 12 year-old-son, and drove to Ely, Nevada, for a dedication to the Tilford Family in the Great Basin National Park the following day; May 23, 2015. My great-aunt Elinor was honored as the last living child of John and Sarah Tilford, ancestors and pioneers of what is now known as the Great Basin National Park, and surrounding areas of White Pine, Lander, and Nye Counties in Nevada.

On my drive to Ely, NV, I stopped along the way and put together a quick set of documents, and typed a letter (in word pad without spell-check), to offer a public comment to the Ely, NV, BLM comment cycle regarding their proposed oil and gas lease sales that were to start in June 2015.

The Ely, NV, BLM public comment cycle actually ended on May 22, 2015, the same day I was driving to Ely, NV, for the dedication, so I pulled over at a Pilot Truck stop in Wendover, NV, and threw together a comment compelling enough to (hopefully) ensure a measure of accuracy in BLM lease sales in places like White Pine County, Nevada.

I have included most of those documents sent to the Ely, NV, BLM on 5/22/15 in this comment, and a few additional documents regarding a new comment cycle I was asked to contribute to ending this week on 7/24/15, to the Ely, NV, BLM.

This request is not in regards to issues I raised about the cultural, historical, or inaccurate records disclaimers made by the BLM in legal land patent records for White Pine, Nye and Lander Counties, but only as it concerns environmental aspects of the plans for White Pine County, and any interests these entities may have in surrounding areas of Nevada and Utah in neighboring counties.

I will forward this email and attachment as a public comment to the Ely, NV, BLM on Friday, but I will not be commenting solely on the environmental impacts of potential and proposed oil and gas leases and sales in White Pine County, because this is not a singular issue.

Quite frankly, the Ely, NV, BLM should understand my concerns with their proposed oil and gas sales to encompass everything their bosses are now proposing with updates in oil and gas offerings as it pertains to Federal and Indian Lands, and the accuracy of data used in these transactions. As I said before, this is not singular. It's holistic.

In addition to the Tilford/Overson family background of my family, it concerns me greatly having gone to

graduate school for a time in anthropology, and developing my own ethnographic skill-set, that it has been reported that the BLM in Salt Lake City UT, as well as the BLM for the Ely, NV, offices apparently altered ethnographic research in 2010 as it concerned the reported history of native tribes in the Spring Valley around the Great Basin National Park.



Based on my initial comment to the Ely, NV, BLM on 5/22/15, and the reports of interference by the Salt Lake City BLM, and the Ely, NV, BLM, in altering the ethnographic material of native tribes in the Spring Valley region, I would suggest to the Ely, NV, BLM, to look to their supervisors and directors in regional and national offices how to proceed with proposed oil and gas lease sales that apparently don't consider the proposed updates of the BLM at this time.

Thank you for your time and consideration.

Sincerely,

Meghan Belaski-Ashe

Meghan Belaski <meghanbelaski@gmail.com>  
To: Blm\_nv\_eydo\_2015ogls@blm.gov

Fri, Jul 24, 2015 at 4:01 PM

Please see forwarded email and attached documentation as my follow-up to the planned Ely, NV, BLM Oil and Gas Lease Sale in December 2015.

[Quoted text hidden]

Meghan Belaski <meghanbelaski@gmail.com>

Thu, Jul 30, 2015 at 12:08 PM



No need to respond right now. I wanted you to be aware of the fact I commented on a BLM proposal in ELY to offer thousands of acres at Hoggum and Osceola for oil and gas development. [redacted] Just a super shady attempt to hand over thousands and thousands of acres of "public lands" to the biggest nuclear and oil and gas companies in the world the day before the Tifford Cabin dedication. For pennies on the dollar where strategic reserves put the estimates somewhere in the tens of billions if not a trillion dollars. Clearly the Dept of the Interior found an issue...FYI.

I am in upstate NY right now and will be back to CO in a few weeks. I will follow up and talk to you when I get back. Hope all is well.

----- Forwarded message -----  
From: Meghan Belaski <meghanbelaski@gmail.com>  
Date: Tuesday, July 21, 2015



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## How One Man Accidentally Killed the Oldest Tree Ever

In 1964, Donal Rusk Currey **killed the oldest tree ever**. It was a Bristlecone pine, and here's why they live so long

By Rose Eveleth  
smithsonian.com  
November 15, 2012



A Bristlecone pine tree. Image: James Marvin Phelps

In 1964, Donal Rusk Currey killed the oldest tree ever. To this day, there has still never been an older tree discovered. The tree was a Great Basin bristlecone pine, and Currey didn't mean to kill it. It was an accident, and one he didn't really understand the ramifications of until he started counting rings.

Radiolab told Don Currey's story in their Oops Episode:

Basically, Currey got his tree corer stuck in the tree. So stuck that it wouldn't come out. An unwitting park ranger helped him by cutting the tree down, to remove the instrument, and later Currey began to count the rings. Eventually, he realized that the tree he had just felled was almost 5,000 years old – the oldest tree ever recorded.

The story is a sad one, but there's a lot of science in there too. Great bristlecone pines are some of the longest living trees in the world. In the 1950s, this was a shock to people, who always thought that for trees, longevity correlated with size. Bristlecone pines max out at around 20 feet tall—they're gnarly, little gnomes of trees, nothing like the majestic Redwoods of California. Collectors Weekly explains how they live so long:

Even if a large portion of a bristlecone is damaged by erosion or fire, small strips of living bark, which Schulman called “life lines,” are able to function and keep the tree alive.

“Bristlecones will grow a thousand years or so, and then the bark will start dying off on one side,” says Tom Harlan, a researcher at the Laboratory of Tree-Ring Research at the University of Arizona. “Therefore, the tree can't support the branches directly above that area, and they die. Pretty soon you're left with a small strip of bark, which is supporting all of the foliage. It might be only 2 inches wide, but the pine is still considered a growing, healthy tree.”

It's also worth noting that figuring out how old a tree is, isn't that easy. Dendrochronology—the fancy word for tree-ring dating—didn't come around until the 1890s. And it's more complicated than just counting rings, since each ring doesn't necessarily correspond to a year. The University of Arizona's Laboratory of Tree Ring Research explains:

Ring-counting does not ensure the accurate dating of each individual ring. Numerous studies illustrate how ring-counting leads to incorrect conclusions drawn from inaccurate dating. Dendrochronologists demand the assignment of a single calendar year to a single ring. Various techniques are used to crossdate wood samples to assure accurate dating.

The tree Currey felled has been nicknamed the Prometheus tree. Collectors Weekly writes:

The Prometheus tree's felling made it doubly symbolic, as the myth of its namesake captures both the human hunger for knowledge and the unintended negative consequences that often result from this desire. Though members of the scientific community and press were outraged that the tree was killed, Currey's mistake ultimately provided the impetus to establish Great Basin National Park to protect the bristlecones. The death of the Prometheus tree also helped to change our larger perception of trees as an infinitely replenishing resource. “It's not going to happen again,” says Schoettle. “But it wasn't something that I think they struggled with at the time, because it was just a tree, and the mindset was that trees were a renewable resource and they would grow back. And it didn't seem like it was any particularly special tree.”

Now, Currey almost certainly didn't fell the oldest tree ever. There are forests in the White Mountains, and elsewhere, where trees currently standing are probably far older than his Prometheus tree. We just don't know about them.



## HISTORY TIMELINE of Great Basin National Heritage Area

- Features Map
- Must Sees
- History Timeline
- Heritage Area Mgt. Plan
- Contact Us / Comment
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**12,000-9,000 B.C.** Sites have been found indicating Paleo-Indian habitation within the Great Basin. They were small hunting groups following the mammoth, bison, camel and horse herds.

**9,000 B.C - 400 A.D.** Implements found in this area from this "Great Basin Desert Archaic Period" include milling stones.

**3,000 B.C.** The lives of the oldest bristlecone pine trees in the Great Basin National Park began.

**500-800 A.D.** The Fremont Culture emerged, leaving behind well-preserved sites indicating agricultural activity as well as hunting and gathering.

**1300's** Numic-speaking peoples entered the Great Basin — the ancestors of present day Western Shoshone and the Southern and Northern Paiute peoples.

**1776** Escalante-Dominguez party passes through Pahvant Valley near Delta, Utah.

**1826** Jedediah S. Smith expedition crosses Great Basin through present-day Millard County on their way to California in search of beaver pelts. In the summer of 1827 they came back in a direct line across Nevada and passed through White River, Spring and Snake valleys.

**1842-45** U.S. Army Captain John C. Fremont expedition encircled the area and reported the internally draining basin as "truly a great basin." His document was the first to explain the many secrets of this land of "contents almost unknown."

**1849** Howard Egan first brought livestock into the Snake Range.

**1851** Governor Brigham Young designates Fillmore as the capital of Utah.

**1852** Construction of Fillmore Statehouse begins. 1853 - Eight members of an exploration team headed by Captain John W. Gunnison were killed at Gunnison Massacre site west of Delta.

**1853** Lieutenant Colonel Edward J. Steptoe investigated the Gunnison massacre and named Mt. Wheeler Jefferson Davis Peak.

**1853** Martial law was declared at the Fillmore Fort due to conflicts with the Indians which became known as the Walker War.

**1855** First wing of Fillmore Statehouse was completed.

**1855** Brigham Young sent a group of elders to establish a mission and plant crops in "Grease Wood Valley" (present-day Snake Valley near Garnison, Utah). Ezra Granger Williams was the first of a party to climb to the top of Mt. Wheeler.

**1858** Utah capitol moved from Fillmore back to Salt Lake City.

**1858** White Mountain Expedition explores the Snake Range (including Wheeler Peak) and other mountain ranges then establish a mission near present-day Panaca, Nevada.

**1859** Captain James H. Simpson passes through White Pine County near what would become Schellbourne station. He called Mt. Wheeler Union Peak.

**1859** Overland Stage and Mail station built at Schellbourne.

**1859** Virginia City rush begins.

**1859** Thomas Robinson discovers ore what will become the Robinson Mining District.

**1860** Wildens establish Fort Willden at Cove Creek.

*A Overson*

- 1860 Pony Express begins using Schellbourne Station.
- 1861 Pony Express Service terminated.
- 1861 First settlers arrive in Snake Valley.
- 1863 Telegraph runs through Schellbourne Station.
- 1863 Treaty between the U.S. and the Goshute Shoshone Indians defined the boundaries of the Goshute Reservation
- 1865 Wildens abandon Fort Willden at Cove Creek.
- 1865 Fort Deseret constructed.
- 1867 Deseret Telegraph establishes office at abandoned Fort Willden.
- 1867 Cove Fort settlers arrive at Cove Creek.
- 1869 Lieutenant George M. Wheeler began comprehensive survey of southwest starting with Mt. Wheeler which now bears his name.
- 1869 Mineral City (Lane City) established.
- 1870 Absalom S. Lehman and Olive S. Lehman settle at 600-acre ranch near Lehman Creek.
- 1871 Aurum Mining District (silver) established east of Schellbourne.
- 1871 Leamington, Utah settled. *Lehman*
- 1872 Gold-bearing quartz rock belt found in Osceola District.
- 1875 Absalom Lehman's younger brother Benjamin S. Lehman and his wife Mary started a ranch at what is now Baker, Nevada.
- 1878 Naturalist John Muir explored Nevada and climbed Mt. Wheeler.
- 1881 It is approximately this time that Absalom S. Lehman is believed to have found and explored Lehman Caves.
- 1881 U.S. Coast and Geodetic Survey set up a heliotope station on Mt. Wheeler.
- 1885 Aurum Mining District, Nevada abandoned.
- 1887 White Pine County seat moved from Hamilton to Ely, Nevada.
- 1890's Town of Baker, Nevada established.
- 1903 Town of Delta, Utah settled.
- 1904 Nevada Consolidated Copper Co. begins underground mining in the Robinson District.
- 1906, Sept. 29 First trains arrive in Ely, Nevada.
- 1909 White Pine County Courthouse construction completed.
- 1909 Theodore Roosevelt designates Nevada National Forest including land that is now the Great Basin National Park.
- 1914 Veteran underground mine in Robinson District closes.
- 1920 Millard County Courthouse erected.
- 1922 President Warren G. Harding issued presidential proclamation establishing Lehman Caves National Monument.
- 1924 American Indian Citizenship Act—granted full U.S. citizenship to America's indigenous peoples
- 1930 Daughters of the Utah Pioneers re-open the Territorial Statehouse in Fillmore, Utah as a museum.
- 1930 Ely Shoshone Indian Reservation created
- 1940 Duckwater Indian Reservation created
- 1942-1945 Topaz Relocation Camp near Delta, Utah holds more than 8,300 Japanese-Americans behind barbed wire "For their own safety."
- 1947 Utah State Legislature returns to Fillmore Territorial Statehouse for one session to commemorate the centennial.
- 1958 Kennecott Copper Corporation acquires full ownership of Robinson District mining operations.
- 1961, Nov. 5 Fort Ruby receives designation from the Department of the Interior as a National Historic Landmark.

1975 Indian Self-determination and Education Assistance Act—began the evolution of tribal self governance

1979 Kennecott Copper Corporation ceases operations in White Pine County.

1986 - **October 27, 1986** President Ronald Regan signed the Great Basin National Park Act.

1991 Magma Nevada Mining, Co. purchases Robinson District mining operations from Kennecott Copper.

1996 BHP Billiton merges with Magma Nevada Mining, Co. to become the new owners of the Robinson District mining operations.

1999 BHP Billiton ceases operations in the Robinson Mining District.

1999 Ely Renaissance Society forms in Ely, Nevada and begins transforming the downtown area with murals, sculptures, and historic renovation projects.

2005 The Great Basin Visitor Center is completed near the town of Baker, NV to provide an interpretive center for the entire Great Basin region.

2005 The Ely Renaissance Society purchases the Geraghty Property near downtown Ely, NV and begins renovation of the area now known as "Renaissance Village."

2006, **Sept. 20** The Nevada Northern Railway - East Ely Yards receive designation from the Department of the Interior as a National Historic Landmark.

2006, **Sept. 29** The Nevada Northern Railway celebrates the 100th anniversary of the railroad reaching Ely.

2006 Highway 50 from Millard County, Utah through White Pine County, Nevada receives national designation as the Great Basin National Heritage Route.

2007, **March 29** The Central Utah Relocation Center (Topaz) receives designation from the Department of the Interior as a National Historic Landmark.

Copyright 2012 Great Basin National Heritage Area P.O. Box 78, Baker Nevada 89311 Info@greatbasinheritage.org 775-234-7171

This website funded in part by the Nevada Commission on Tourism

Who owns/ran  
Kennecott Copper?

# Handcarts to Zion

was a man to  
uld work their  
woman had as

if any one has  
em in any way  
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say, surely we

## Appendix K

### SONGS OF "THE GATHERING"

#### FAREWELL TO THE LAND OF MY BIRTH<sup>1</sup>

By Ann Cash

How long in the world I have sigh'd,  
From the days of my earliest youth,  
When, sick of its sin and its pride,  
I sought and I pray'd for the Truth.

It came, and the Gospel I found,  
To me it was life, joy, and peace;  
Salvation was beaming around,  
With hopes of a happy release.

And then I was longing to be  
Where the will of my Father is done,  
Where the noble, the pure, and the free  
On the earth are united in one.

I go where no tyrants dare come,  
Where oppressors would tremble to tread,  
Where the honest in heart find a home,  
Where the blessings of heaven are shed.

I go where fair virtue supplies  
Rich fountains of blessings for all,  
Where the Kingdom of Heaven will rise,  
While the nations will crumble and fall.

'Tis with joy I am bidding farewell  
To the proud, boasted land of my birth;  
I go with the upright to dwell,  
Where the pure will find heaven on earth.

It is Faith, 'tis not fancy, that paints  
The vision of bliss that I see;  
I go to the home of the Saints -  
To Zion, the land of the Free.

<sup>1</sup> Printed in the *Millennial Star* of April 14, 1855.

been president of the Saints on the "Thornton's" voyage, became Captain of the Fourth Handcart Company. Edward Martin,<sup>3</sup> who was also returning from a British mission and had fathered the "Horizon's" passengers, was to be Captain of the Fifth Company. Inasmuch as the two companies were so closely related and were to share the same ordeals, we shall treat their stories together – at least, the early portion of their trip.

Willie's company comprised 500 persons. They had 120 handcarts, 5 wagons, 24 oxen, and 45 beef cattle and cows. Martin's party consisted of 576 souls, with 146 carts, 7 wagons, 30 oxen, and 50 cows and beef cattle. Behind them were to travel two ox trains – Captain W. B. Hodgett's 33-wagon company carrying 185 passengers with 187 oxen, cows, and beef cattle; and Captain John A. Hunt's train of 50 wagons, with 297 oxen, beef cattle, and cows, and carrying 200 emigrants.<sup>4</sup>

John Chislett, one of the sub-captains of the Fourth Company, says that the company was divided into groups of 100 persons each, with a sub-captain over each of these. He writes: "The third hundred were principally Scotch; the fifth, Scandinavians. The other hundreds were mostly English. To each hundred there were five round tents, with twenty persons to a tent; twenty hand-carts, or one to every five persons; and one Chicago Wagon, drawn by three yoke of oxen, to haul provisions and tents. Each person was limited to seventeen pounds of clothing and bedding. . . ."

<sup>3</sup> Edward Martin was born in Preston, Lancashire, England, November 13, 1818. After joining the Mormon Church and coming to America he became a member of the Mormon Battalion in the Mexican War. Upon his return from a mission in England he became Captain of the Fifth Handcart Company. He died in Salt Lake City, August 8, 1882. *Ibid.*, 261-62.

<sup>4</sup> Solomon F. Kimball, "Belated Emigrants of 1856," in *The Improvement Era*, xvii, pp. 5-7.

"The strength of the company was equalized as much as possible by distributing the young men among the different families to help them. Several carts were drawn by *young girls* exclusively; and two tents were occupied by them and such females as had no male companions."<sup>5</sup>

The Martin Company was similarly organized. The road across Iowa was good; and the journey, though made through heat and dust, was accomplished without unusual difficulties. A few dropped out en route, to await more propitious traveling, or to forsake the project entirely.

The journey to Florence, 277 miles, was made in a little less than four weeks, Willie's Company reaching there August 11, and Martin's on the twenty-second. Here each company was delayed for repairs.

J. H. Latey, writing from Florence, August 14, and reporting the arrival of Willie's Company, says: "The companies stay here longer than they otherwise would in consequence of their carts being unfit for their journey across the Plains; some requiring new axles, and the whole of them having to have a piece of iron screwed on to prevent the wheel from wearing away the wood."<sup>6</sup>

These emigrants impressed the representative of the *Council Bluffs Bugle*, who wrote in this paper of August 26:

"A few days since, in company with Colonel Babbitt, Secretary of Utah, and several citizens of this place,

<sup>5</sup> "Mr. Chislett's Narrative," in Stenhouse, *The Rocky Mountain Saints* (New York, 1873), 314-15. Chislett names the sub-captains of the various hundreds as follows: "first, Millen Atwood; second, Levi Savage; third, William Woodward; fourth, John Chislett; fifth, [Jacob A.] Ahmensen."

<sup>6</sup> *Millennial Star*, xviii, p. 638.

handcarts across. The river was wide, the current strong, the water exceedingly cold. The company was barely over when snow and sleet began to fall, accompanied by a piercing north wind. Winter had come upon them suddenly in a fury.

Josiah Rogerson of Martin's Company says: "The crossing of the North Platte was fraught with more fatalities than any other incident of the entire journey. . . . More than a score or two of the young female members waded the stream that in places was waist deep. Blocks of mushy snow and ice had to be dodged. The result of wading of this stream by the female members was immediately followed by partial and temporary dementia from which several did not recover until the next spring."<sup>17</sup>

Mrs. Jackson adds, in reference to this crossing: "Some of the men carried some of the women on their back or in their arms, but others of the women tied up their skirts and waded through, like the heroines that they were, and as they had gone through many other rivers and creeks. My husband (Aaron Jackson) attempted to ford the stream. He had only gone a short distance when he reached a sandbar in the river, on which he sank down through weakness and exhaustion. My sister, Mary Horrocks Leavitt, waded through the water to his assistance. She raised him up to his feet. Shortly afterward, a man came along on horseback and conveyed him to the other side. My sister then helped me to pull my cart with my three children and other matters on it. We had scarcely crossed the river when we were visited with a tremendous storm of snow, hail, sand, and fierce winds."

<sup>17</sup> Account of Josiah Rogerson, in the *Salt Lake Tribune*, Jan. 14, 1914.

After prayers, all are ordered to bed. I had been to many of the meetings previously but this time I saw sister Scott cooking a nice pot of dumplings just before the bugle sounded. She hid the dumplings under the wagon, being a zealous woman, and went to prayer meeting, but I did not go this time, I stood back and looked for the dumplings, found them and being so hungry I could not resist the temptation, sat down and ate them all."<sup>20</sup>

Deaths continued in the camp. Some died, says Bond, "lying side by side with hands entwined. In other cases, they were found as if they had just offered a fervent prayer and their spirit had taken flight while in the act. . . Some died sitting by the fire; some were singing hymns or eating crusts of bread."

Concerning the burials, Bond reports: "Captain Martin stood over the grave of the departed ones with shotgun in hand, firing at intervals to keep the crows and buzzards away from hovering around in mid air."

Sister Sirman, whose husband was near death and whose two sons were suffering with frozen feet,<sup>21</sup> appealed to Captain Martin, "Do you think that the relief party will come soon with food, clothing and shoes?"

Bond recalls that the Captain's answer was, "I almost wish God would close my eyes to the enormity of the sickness, hunger and death among the Saints. Yes, Sister Sirman, I am as confident as that I live that the President (Brigham Young) will and has dispatched

<sup>20</sup> John Bond, *Handcarts West in '56* (privately issued in mimeograph form, 1945), 23.

<sup>21</sup> Bond, *ibid.*, 25, says that in 1912 he met one of the boys, John Sirman, in Blackfoot, Idaho. One leg had been amputated as a result of the freezing in 1856.

the relief valley boys to us and I believe that they are making all the haste they can, that they are bringing flour, clothing, shoes, etc."

A day or two later, while young Bond was in front of the Scott wagon he saw Sister Scott looking into the West. All at once she sprang to her feet and screamed at the top of her voice, "I see them coming! I see them coming! Surely they are angels from heaven!"

And so it was. On the twenty-eighth of October, when despair had almost overwhelmed the camp, the messengers of rescue came. Joseph A. Young (son of President Young), Daniel W. Jones, and Abel Garr rode into camp amid the tears and cheers of the emigrants.<sup>22</sup> These men were an express from the advance relief company from Salt Lake, bringing the glad word that assistance, provisions, and clothing were near, that ten wagons under Captain George D. Grant were encamped at the abandoned houses of an old trading fort near Devil's Gate.<sup>23</sup>

These couriers later reported: "We found the Martin Company in a deplorable condition, they having lost fifty-six of their number since crossing the North Platte, nine days before. Their provisions were nearly gone, and their clothing almost worn out. Most of their bedding had been left behind, as they were unable to haul it, on account of their weakened condition. We advised them to move on, every day just as far as they

<sup>22</sup> They had been sent from Grant's encamped wagon party near Devil's Gate on Oct. 27. See entry of that date in the Journal of the First Rescue Party, Appendix D.

<sup>23</sup> There is a good brief account of these events by J. Jaques in *Millennial Star*, XLX, pp. 254-55. See also Daniel W. Jones, *Forty Years Among the Indians* (Salt Lake City, 1890), 62-75.

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could, as that was the only possible show they had to escape death."<sup>24</sup>

Joseph Young and his companions pushed on to the Hunt wagon train, ten miles farther east. After finding this rear company, back near the Platte Crossing, and urging it to push westward, Jones and Garr turned back towards Devil's Gate. They overtook the Martin Company, now on the move, slowly ascending a long muddy hill.

"A condition of distress," writes Jones, "here met my eyes that I never saw before or since. The train was strung out for three or four miles. There were old men pulling and tugging their carts, sometimes loaded with a sick wife or children - women pulling along sick husbands - little children six to eight years old struggling through the mud and snow. As night came on the mud would freeze on their clothes and feet. There were two of us, and hundreds needing help. What could we do? We gathered on to some of the most helpless with our riatas tied to the carts, and helped as many as we could into camp on Avenue Hill. This was a bitter, cold night and we had no fuel except very small sage brush. Several died that night. Next morning, Brother Young having come up, we three started for our camp near Devil's Gate."<sup>25</sup>

Upon arrival at the encampment of the relief party, and apprising them of the desperate plight of the emigrants, Captain Grant and most of the rescuers hitched up their teams and moved eastward, leaving part of the men at the trading houses with most of the supplies. On the last day of October Grant's rescue party met

<sup>24</sup> S. F. Kimball, in *Improvement Era*, XVII, p. 204.

<sup>25</sup> D. W. Jones, *op. cit.*, 68-69.

Martin's Company at Greasewood Creek, sixteen miles east of Devil's Gate. They gave every possible immediate assistance, and helped the handcart sufferers move along toward the supply depot.

On November 1, amid falling snow, camp was made near Independence Rock, only five miles east of Devil's Gate.

"There was a foot or eighteen inches of snow on the ground," wrote John Jaques, "which, as there were but one or two spades in camp, the emigrants had to shovel away with their frying pans, or tin plates, or anything they could use for that purpose, before they could pitch their tents, and then the ground was frozen so hard that it was almost impossible to drive the tent pegs into it. Some of the men were so weak that it took them an hour or two to clear the places for their tents and set them up."<sup>26</sup>

The next day the desperate company arrived at Devil's Gate fort. On November 3, Captain Grant sent an express - Joseph A. Young and Abel Garr - to Salt Lake Valley. In preparing for the journey, says John Jaques, "Joseph A. put on three or four pairs of woolen socks, a pair of moccasins, and a pair of buffalo hide over-shoes with the wool on, and then remarked, 'There, if my feet freeze with those on, they must stay frozen till I get to Salt Lake.'<sup>27</sup>

In his dispatch to Brigham Young, Captain Grant said: "It is not much use for me to attempt to give a description of the situation of these people, for this you will learn from your son Joseph A. and br. Garr, who are the bearers of this express; but you can imagine

<sup>26</sup> Quoted in Whitney, *op. cit.*, 1, p. 562.

<sup>27</sup> *Ibid.*, 562. See Joseph A. Young's report after reaching Salt Lake City, Appendix F.

20

between five and six hundred men, women and children, worn down by drawing handcarts through snow and mud; fainting by the wayside; falling, chilled by the cold; children crying, their limbs stiffened by cold, their feet bleeding and some of them bare to snow and frost. The sight is almost too much for the stoutest of us: but we go on doing all we can, not doubting or despairing.

"Our company is too small to help much, it is only a drop to a bucket, as it were, in comparison to what is needed. I think that not over one-third of Mr. Martin's company is able to walk. This you may think is extravagant, but it is nevertheless true. Some of them have good courage and are in good spirits; but a great many are like children and do not help themselves much more, nor realize what is before them.

"I never felt so much interest in any mission that I have been sent on, and all the brethren who came out with me feel the same. We have prayer without ceasing, and the blessing of God has been with us.

"Br. Charles Decker has now traveled this road the 29th time, and he says he has never before seen so much snow on the Sweet Water at any season of the year. . .

"Br. Hunt's company are two or three days back of us, yet br. Wheelock will be with them to counsel them, also some of the other brethren who came out.

"We will move every day toward the valley, if we shovel snow to do it, the Lord helping us.

"I have never seen such energy and faith among the 'boys,' nor so good a spirit as is among those who came out with me. We realize that we have your prayers for us continually, also those of all the Saints in the Valley. . .<sup>28</sup>

<sup>28</sup> *Deseret News*, Nov. 19, 1856. The entire report is printed in Appendix E.

27

FIFTH COMPANY  
EDWARD MARTIN, Captain (38)

Acres, Joseph (24) and wife	Barnes, Deborah (8)
" Ann (23) (wife)	" William L. (5)
Allen, Eliza, and daughter	Bartholme, Bone (26) (from Italy)
" Eleanora (18)	Barton, William (47) with family
Allen, Maria (21) daughter of Mary Allen	" Mary Ann (36) (wife)
Anderson, Ann (47)	" Francis (3½)
Andrews, John J. (44)	" Elizabeth (1½)
Anglesea, Martha (22)	Beer, Benjamin (44), and wife
Ashton, William (33) with wife and 4 daughters	" Margaret (44)
" Sarah Ann (33) (wife)	Bennett, Harriet (53)
" Betsy (11)	Beswick, Ann (65)
" Sarah (7)	" Joseph (33)
" Mary (4)	Binder, Eliza (24)
" Elizabeth (2)	" William (24)
Atherton, Ellen (57)	Bird, Thomas (P.) (18)
Bailey, John (49) with wife and 4 sons	Bitten, John (26) with family
" Jane (45) (wife)	" Jane (19)
" Langley (18)	" Sarah S. (17)
" John (15)	Blackham, Martha (47) with family
" Thomas (12)	" Samuel (21)
" David (5)	" Sarah (16)
Barlow, Ann (58) with 1 dau. and 2 sons	" Thomas (13)
" John (17)	Blair, David (43) with family
" Jane (15)	" Deborah (39) (wife)
" Joseph (7)	" Deborah (8)
Barnes, George (41) with wife and children	" Elizabeth (5)
" Jane (41) (wife)	" David (6 mo.)
" Margaret (15)	Blakey, Richard (36) & family
" Betsy (12)	" Caroline (36) (wife)
" Esther (10)	" Caroline Jr. (16)
	" John M. (6)
	" Richard Jr. (2)

APPENDIX M: FIFTH COMPANY ROSTER 297

Douglas, Mary (36) (wife)  
 " William (14)  
 Durham, Thomas (27)  
 " Mary (27) (wife)  
 Eccles, Thomas (37) with family  
 " Alice (34) (wife)  
 " Mary Ann (11)  
 " Martha (8)  
 Edmonds, Charles (56)  
 Edwards, William (28)  
 " Harriet (16) (wife)  
 Elliot, Eliza (18)  
 Foster, Sarah (25)  
 Franklin, Thomas (33) with family  
 " Jane (33) (wife)  
 " Lydia (14)  
 Franks, Sarah (23)  
 Gibbons, Jane (25)  
 Giles, Aaron (B.) (15)  
 Gourley, Paul (42) with family  
 Green, Charles (26) with family  
 " Ann (22) (wife)  
 " George (4 months)  
 Green, Elizabeth (23)  
 Greening, Mary Ann (27)  
 Griffith, John, with family  
 " Elizabeth (30) (wife)  
 " Margaret A. (16)  
 " John (11)  
 " Jane E. (8)  
 " Robert L. (5)  
 Grundy, Sarah (41)  
 Gregory, Ann (63)  
 Gregory, Mary (59)  
 Haigh, Samuel (20)  
 Haigh, Sarah Ann (18)

Halford, John (57)  
 " Mary (53) (wife)  
 Harrison, William (40) with family  
 " Hannah (38) (wife)  
 " Aaron (18)  
 " George (14)  
 " Mary Ann (12)  
 " Alice (10)  
 " Olivia (6)  
 " Hannah Jr. (2)  
 " Sarah Ellen (1 month)  
 Hall, Charles (21) with family  
 " Elizabeth (24) (wife)  
 Harper, Mary (64)  
 Hartle, John (70) with family  
 " Lydia (71) (wife)  
 " Mary (36) (daughter)  
 Hartley, Eliza (39) and family  
 Haslam, Esther (50)  
 " Joseph (18) (son of Esther)  
 Hawkey, Hannah (33) with family  
 " James (14)  
 " Margaret (4)  
 " Hannah Jr. (3)  
 Haydock, Elizabeth (55)  
 " Mary (21)  
 Herring, George (16)  
 " Mary (35)  
 Heycock (Haycock), Elizabeth (45)  
 Hicks, Ann (20)  
 Higgs, Lydia (45)  
 Hill, Mary (48)  
 Hill, William (48)  
 " William Jr. (9) (son)

\* DADS  
 GREAT GRANDPARENTS  
 (1) SARA WELLS  
 HARTLEY  
 (2) CLAUENTINE  
 HARTLEY  
 DIED 1854  
 \* BIRTH DATE  
 JAN - HARTLEY  
 B. 9-14-1836  
 (A) ROBERT  
 GILL HARTLEY  
 B. 1840  
 (B) SAMUEL  
 HARTLEY  
 B. 1842  
 (C) LUCY  
 HARTLEY  
 (D) SARAH  
 HARTLEY  
 B. 1845  
 8 - JAMES  
 HARTLEY  
 B. 1850  
 5  
 THE FAMILY  
 MADE THE  
 KIDS MADE THE  
 TRIP IN 1856  
 THE FAMILY  
 HARTLEY  
 JAMES

# Zundle, Josephine Hartley, Biography of Josephine Hartley Zundle, 1-2. (Trail excerpt transcribed from "Pioneer History Collection" available at Pioneer Memorial Museum [Daughters of Utah Pioneers Museum], Salt Lake City, Utah. Some restrictions apply.)

## Trail Excerpt

Edward Martin Company (1856)

Matilda Jane Hartley

Sarah Wells Hartley

Samuel Hartley

Eliza Gill Hartley

Josephine Lucy Hartley

Pioneer Memorial Museum (Daughters of Utah Pioneers Museum), Salt Lake City, Utah

On August 25, 1856 we started on a thousand mile journey across the plains. I was ten years old at this time, and to my great sorrow, I had chills and fever, and had to have my mother pull me on the handcart, which was heavily loaded with our provisions. The deep sand, rocky roads, and fording streams made it almost impossible for mother to pull it, so we had to leave some of our things along the roadside. Mother would cook our meals and then rest for the night, and then take up the journey again.

We continued on with our journey with continued hardships, until we reached Laramie, Wyoming, about October 8, 1856. we rested here for a short time, and it was necessary for us to dispose of our prized possessions and buy corn meal, beans, and other food as our supply was gone. We were rationed to a pound of flour per day. This ration was decreased several times until all of our flour was gone. The captain was very kind to mother and gave her some of the flour sacks to scrape off with a knife for what little flour was left along with the lint. With this, she was able to make cakes and mush to help sustain life. At this time, winter was setting in and

on October 29, 1856, we traveled 10 miles through snow, and at this time had to reduce our belongs to 10 pound for adults and 5 pounds for children, sacrificing our bedding, which added to our misery and suffering. My mother's and sister's skirts were frozen stiff. They would try to dry them out in the evening by the fires, but were not very successful. My brother, Samuel's feet were frozen, and he lost one leg below the knee and always wore a peg leg after that.

On our way, we camped at a gulch called "Martin's Ravine". Here we suffered terribly with the cold. It was only with the Power of God that we survived. When we reached Devil's Gate, we met wagons from Salt Lake City with provisions and clothing waiting for us. From this time on, the journey was better and much easier.

We reached Salt Lake City with the company on November 30, 1856.

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## Eliza Gill Hartley

Original name: Eliza Gill Hartley

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Birth: Nov. 28, 1815  
 Sheffield  
 South Yorkshire, England

Death: Nov. 17, 1891  
 Oak City  
 Millard County  
 Utah, USA

On May 25, 1856 she with 5 of her children set sail on the ship HORIZON for Boston. They sailed from Liverpool with the saints. They arrived in Boston and reached Iowa City by train by July 8, 1856.

They crossed the plains in the infamous Martin handcart company; many lives were lost with much suffering.

Eliza and her two girls walked and pulled their hand carts, along with the two youngest girls. Her daughter Josephine was sick all the way with fever and chills and felt so bad that she had to be pulled by her mother and sisters. Her son, Samuel got lost in a snow storm with everyone looking for him through the night. They found him the next morning, but he lost his leg and had a wooden leg the rest of his life.

They arrived in Salt Lake City November 30, 1856.

Her husband, Samuel Hartley did not join the LDS church and did not immigrate with them to America.

Family links:

Children:

- Sarah Wells *Hartley Soper* Curtis (1836 - 1921)\*
- Matilda Jane *Hartley* Overson (1838 - 1916)\*
- Samuel Hartley (1842 - 1898)\*
- Josephine Lucy *Hartley* Zundle (1846 - 1929)\*
- Farwell Harrison Hartley (1848 - 1919)\*

\*Calculated relationship

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 Millard County  
 Utah, USA  
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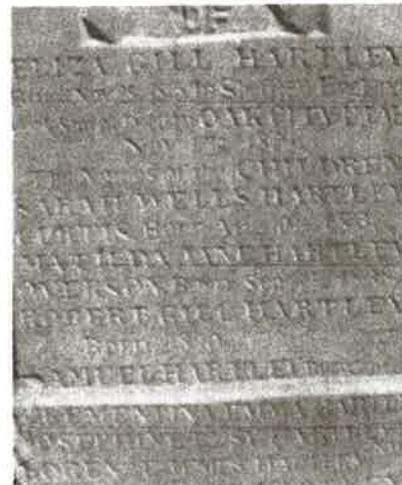
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## Sarah Wells Hartley Soper Curtis

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Birth: Aug. 10, 1836, England  
 Death: Jul. 12, 1921  
 Salem  
 Utah County  
 Utah, USA

Sarah was well educated because she was able to attend private school in England. On May 22, 1856, Hartley started on an oceanic and overland voyage for Zion with her mother, Eliza Gill Hartley, and four of her younger siblings. They sailed from Liverpool on board the "Horizon." They landed in Boston, Massachusetts, June 30, 1856 in good health. They continued on to Iowa City. There they waited two weeks for their handcarts to be completed. They had joined the Edward Martin Handcart Company.

Sarah helped pull and push the heavily laden handcart on which rode the little sister, Josephine, who was ill. They arrived in Salt Lake Valley the last of November, having endured extreme cold, bad storms, and hunger. One third of the company died on the way to the Valley.

After Sarah arrived in Salt Lake, she married Richard Soper. They had two sons and were later divorced. Sarah moved to Salem where she was employed as a housekeeper by Lyman Curtis who had four sons. She later married Lyman Curtis and had five daughters and a son.

Her 2 sons by Richard Soper were adopted by Lyman Curtis. Sarah was a talented weaver and wove the cloth for the family clothing which she made. Peach leaves and sage brush were used to make her dye for the cloth. She knit stockings and sweaters for the needy and for the men in the armed services serving in World War 1. She made temple clothing for members of the Church. She made and quilted dozens of quilts for family and friends. Sarah instilled in her family a love for good literature and especially for the gospel of Jesus Christ. She was a person of great spiritual strength. Sarah served in the Relief Society and was also a visiting teacher until her death in 1921.

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Sarah Wells Hartley was the daughter of Elizabeth Gill and Samuel Wells Hartley. Sarah married Richard Soper approximately 1859. They had two children. They divorced. Sarah



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married Lyman Curtis July 26, 1862 in Salt Lake City, Utah.

She had seven children with Lyman: Parley Perry Curtis, Asa Lyman Curtis, Eliza Jane Curtis, Sarah Lusina Curtis, Millicent Curtis, Emma Cornelia Curtis and Josephine Curtis.

She was a handcart pioneer in 1856

**Family links:**

**Parents:**

Eliza Gill Hartley (1815 - 1891)

**Spouse:**

Lyman Curtis (1812 - 1898)\*

**Children:**

Parley Perry Curtis (1858 - 1939)\*  
Sarah L. Curtis Snyder (1863 - 1921)\*  
Eliza Jane Curtis Durfey (1865 - 1949)\*  
Millicent Curtis Smith (1867 - 1965)\*  
Emma Cornelia Curtis Hanks (1869 - 1951)\*  
Josephine M Curtis (1872 - 1877)\*  
Asa Lyman Curtis (1877 - 1961)\*

**Siblings:**

Sarah Wells Hartley Soper Curtis (1836 - 1921)  
Matilda Jane Hartley Overson (1838 - 1916)\*  
Samuel Hartley (1842 - 1898)\*  
Josephine Lucy Hartley Zundie (1846 - 1929)\*  
Farwell Harrison Hartley (1848 - 1919)\*

\*Calculated relationship

**Burial:**

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**THE DESCENDANTS OF CHRISTIAN OVERSON**

**Christian OVERSON**--b. 11 June 1840; chr. 19 July 1840, Vindinge, Herrested Parish, Svendborg, Denmark; died 12 June 1924, Leamington, Utah; bur. 14 June 1924, Oak City, Utah; md. 1st--16 July 1862, Mt. Pleasant, Utah to Jensene Christine JENSEN, b. 17 May 1841; chr. 20 May 1841, Elling, Hjorring, Denmark; died 19 Sept. 1879, Oak City; bur. Oak City.

**Children:**

1. Joseph OVERSON--b. 18 Sept. 1863, Filmore, Utah; died 15 Jan. 1941, Provo, Utah; bur. 19 Jan. 1941, Leamington, Utah; md. 10 Apr. 1895, Salt Lake City, Utah to Mabel Janette SMITH, b. 2 Aug. 1878, Paradise, Utah; died 8 Nov. 1961, Nephi, Utah; bur. 11 Nov. 1961, Leamington, Utah; dau. of Louis Morgan Bryant and Eliza Jane (HAINES) SMITH.
2. Hyrum Fredrick OVERSON--b. 11 Aug. 1865, Deseret, Utah; died 1 Nov. 1928, Lynndyl, Utah; bur. 3 Nov. 1928, Leamington, Utah; md. 3 Apr. 1891, Oak City, Utah to Malinda Viola WILCOX, b. 10 Mar. 1874, Onawa, Iowa; died 17 Sept. 1959, Redwood City, Calif.; bur. 21 Sept. 1959, Watsonville, Calif.; dau. of William Christian and Lucinda Percy (PADEN) WILCOX.
3. Emma OVERSON--b. 23 Apr. 1868, Deseret, Utah; died 2 Feb. 1957; md. 3 Apr. 1884 to August Christiansen NIELSON, b. 6 Aug. 1860, Stupberup, Marebo, Denmark; died 8 Jan. 1937, Nephi, Utah; son of Lars and Sidsel (PETERSON) NIELSON.
4. Mary Anna OVERSON--b. 17 Dec. 1871, Oak City, Utah; died 14 Feb. 1941, San Francisco, Calif.; bur. 17 Feb. 1941, San Francisco, Calif.; md. 17 Nov. 1891, Salt Lake City, Utah to John William STRANGE, b. 15 June 1869, Payson, Utah; died 10 Feb. 1945, San Francisco, Calif.; son of John W. and Lydia (ROLFE) STRANGE.
5. Sina C. OVERSON--b. 25 July 1874, Oak City, Utah; died 27 Aug. 1874.
6. James Christian OVERSON--b. 10 Jan. 1875, Oak City, Utah; died 19 Nov. 1937, Cedar City, Utah; bur. 26 Nov. 1937, Pioneer Cemetery, Watsonville, Calif.; md. 3 June 1896, Nephi, Utah to Verena Carolina CARSON, b. 23 Dec. 1877, Goshen, Utah; died 14 Aug. 1939, Watsonville, Calif.; bur. 17 Aug. 1939, Pioneer Cemetery, Watsonville, Calif.; dau. of John (Jr.) and Mary Ann (PARTRIDGE) CARSON.

→ **Christian OVERSON** md. 2nd--11 April 1880 to Matilda Jane HARTLEY, b. 14 Sept. 1838, Sheffield, Yorkshire, England; died 27 Oct. 1916, Leamington, Utah; bur. --Oak City, Utah; dau. of Samuel and Eliza (GILL) HARTLEY.

HANDCART →

**Children of 2nd marriage:**

DAD'S GRANDMOTHER →

1. Sarah Josephine OVERSON--b. 28 Feb. 1881, Leamington, Utah; died 5 Dec. 1955, San Francisco, Calif.; Bur. 8 Dec. 1955,

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(Children of Christian and Matilda cont.)

San Francisco, Calif.; md. 17 May 1908, Salt Lake City, Utah to John TILFORD, b. 15 Apr. 1882, Ocala, Nev.; died 28 Mar. 1942, Ely, Nev.; bur. 2 Apr. 1942, Ely, Nev.; son of Thomas Boone and Mary Cherry ( ) TILFORD.

2. Lyman Andrus OVERSON--b. 11 May 1883, Leamington, Utah; died 27 Aug. 1968, Delta, Utah; bur. 31 Aug. 1968, Leamington, Utah; md. 7 June 1916, Salt Lake City, Utah, to Harriet Alida ROBERTS, b. 25 Oct. 1894, Kanosh, Utah; died 11 Feb. 1931, Leamington, Utah; bur. 14 Feb. 1931, Leamington, Utah; dau. of Charles Willis and Gertrude Lydia (MUNDY, "NEDAULD") ROBERTS (raised by Nedauld Family.).

Matilda Jane HARTLEY md. 1st--4 Mar. 1857 (sealed) to Russell Gideon BROWNELL. (This sealing was annulled 9 Sept. 1865, prior to her second marriage.)

Children:

1. Russeleta BROWNELL
2. Esther BROWNELL md. \_\_\_\_\_ HILLHOUSE.

Matilda md. 2nd--24 Mar. 1865 (sealed) to William WHITE. (This sealing was annulled 8 April 1880, prior to her marriage to Christian.)

Children:

1. Gilbert WHITE--b. 16 May 1866; died 3 Jan. 1882; bur. Oak City Cemetery; epitaph reads "I was my mother's only son; to me she looked for aid."

The descendants of Christian Overson will be listed on the following pages in family groups, each group beginning with one of Christian's children.

\* \* \* \* \*

The family was the first form of church ordained of God that children might be trained up to return to God with all of their attributes increased to their highest possibility, indeed the family was the very first family organization to bring affection, honor and influence for good into groups, constituting what was the beginning of the first church on the Earth. The common bond of care and love is the ideal of a perfect family.

MATILDA JANE HARTLEY AS A CHILD.

FATHER: Samuel HARTLEY, born about 1808, Sheffield, Yorkshire, England.  
 MOTHER: Eliza GILL, born 28 Nov. 1815, Sheffield, Yorkshire, England.  
 d. 17 Nov. 1891, Oak City, Utah. Bur. Oak City, Utah.

Children:

1. Sarah Wells HARTLEY--10 Aug. 1836, Sheffield, Eng.; md Lyman CURTIS.  
 Children: d. 10 Aug. 1836./
  1. Charley CURTIS--b. \_\_\_\_\_ of Chaffield.
  2. Emma CURTIS-- b. \_\_\_\_\_ " " md. \_\_\_\_\_ HANKS
  3. Millie CURTIS--b. \_\_\_\_\_ " " Md. \_\_\_\_\_ SMITH.
  4. Br. A.C. CURTIS--b. \_\_\_\_\_ " "
2. Clementine HARTLEY--b. \_\_\_\_\_ abt.1837, " never md, died young.
- \* 3. Matilda Jane HARTLEY--b. 14 Sept. 1838, Sheffield, Md. #1; 4 Mar. 1857.  
 Russell Gideon Brownell--b. \_\_\_\_\_ (once bishop of Bountiful Ward.)  
 Children:
  1. Russeleta BROWNELL-- b. \_\_\_\_\_ md. \_\_\_\_\_ Hillhouse.
  2. Esther BROWNELL--b. \_\_\_\_\_ md. \_\_\_\_\_
4. Robert Gill HARTLEY--b. \_\_\_\_\_ 1840, Sheffield, Eng.
5. Samuel HARTLEY--b. 14 Jan. 1842, Sheffield, Eng.; urmd. d. 19 June 1895
6. Lucy Josephine--b. \_\_\_\_\_ abt 1845, Sheffield, Eng.; md. Thomas Zundel
7. Farewell HARTLEY--b. 19 Sept. 1848, Sheffield, Eng.
8. James Lorenzo HARTLEY--b. \_\_\_\_\_ abt 1850, Sheffield, Eng.

#3. Matilda Jane HARTLEY.-- md #2. William WHITE. Md. 24 Mar. 1865.

#1 Marriage unfulfilled 4 Mar. 1865.

Child by #2:

Gilbert WHITE.-- b. 16 May 1866, d. 3 Jan. 1882. b. and d. in Oak City, Utah. His epitaph: I was my mothers only son, to me she looked for aid.

Matilda Married #3. Christian OVERSON, 11 Apr. 1880. She died 27 Oct. 1916, in Leamington. Bur. Oak City, Ut.

\* \* \* \* \*

Matilda was an angel of duty to her family, always going beyond the things that were necessary, but making of it a specialty, as food was always served in a most appetizing manner, her home was artistically and ideally cared for, and every one felt a warm welcome.

SARA JOSEPHINE OVERSON

(Seventh child of Christian, first child of Christian and his second wife, Matilda Jane Hartley.)

Sara Josephine OVERSON--b. 28 Feb. 1881, Oak City, Utah; d. 5 Dec. 1955, San Francisco, Calif.; bur. 8 Dec. 1955, San Francisco, Calif.; md. 17 May 1908, Salt Lake City, Utah, to John Dixon TILFORD, b. 15 Apr. 1882, Ocala, Nev.; d. 28 Mar. 1942, Ely, Nev.; bur. 2 Apr. 1942, Ely, Nev.; son of Thomas Boone and Mary Cherry ( ) TILFORD.

Children:

1. Ralph Dixon TILFORD--b. 10 Feb. 1909, Leamington, Utah; md. 17 Sept. 1941 to Ann MAVORINAC.  
Children:
  1. Bonita Christine TILFORD--b. 16 Feb. 1942, Kimberly, Nev.
  2. Sarah TILFORD--b. 18 June 1944, Kimberly, Nev.
  3. Jaunita TILFORD--b. 14 Apr. 1948, Kimberly, Nev.
2. Leland Overson TILFORD--b. 29 May 1910, Leamington, Utah.
3. Bonnie Florence TILFORD--b. 3 Oct. 1911, Cherry Creek, Nev.; md. 1st, 4 May, 1928 to Emmett Michael ZALKASKE; md. 2nd, 29 Jan. 1942 to Louis OLIVERI; md. 3rd, Thomas Harold O'BRIEN; md. 4th, 18 Sept. 1957, Tonapah, Nev. to Paul PASCUZZO, b. 16 Aug. 1916, Bakersfield, Calif.; son of Carlo and Concetta Maria (ZZORRA) PASCUZZO.  
Children by No. 1:
  1. Michael Hartley ZALKASKE--b. 6 Sept. 1929, San Francisco, Calif.; md. 1st, June 1, 1947 to Marcia Maylone; md. 2nd, 3 Sept. 1949 to Ann PERRY.  
Children by No. 2:
    1. Michael Jay ZALKASKE--b. 28 May 1951.
    2. Susan Lynn ZALKASKE--b. 3 Feb. 1953.
4. Elinor Josephine TILFORD--b. 1 May 1916, Ely, Nev.; md. 18 July 1937, San Francisco, Calif. to William Whittlesey CHARLESTON, b. 27 Apr. 1911, San Francisco, Calif.; son of George Fiske and Vivian Cora (STRATTON) CHARLESTON.  
Children:
  1. David Scott CHARLESTON--b. 29 Apr. 1942, San Francisco, Calif.; md. Carneen Rae WIGGINS. DAD
  2. John Keith CHARLESTON--b. 14 Apr. 1945, San Francisco, Calif. DAD
5. Paul Christian TILFORD--b. 17 Sept. 1917, Garrison, Utah.
6. Mary Christine TILFORD--b. 9 Feb. 1919, Ely, Nev.; md. 1st, Samuel Edward UNGER; md. 2nd, 23 Aug. 1941, to Anthony Leo BELASKI, died 19 Aug. 1950, Santa Rosa, Calif., bur. 23 Aug. 1950, San Francisco, Calif.  
Children by No. 1:
  1. Carol Ann UNGER--b. 19 Sept. 1936, San Francisco, Calif.
  2. Edward Michael UNGER--b. 3 June 1939, San Francisco, Calif.Children by No. 2:
  1. Anthony Leo BELASKI Jr.--b. 17 Jan. 1943, San Francisco, Calif.

DAD'S  
MOM

my grandmother my father

LYMAN ANDRUS OVERSON

(Eighth child of Christian and the second child of  
Christian and his second wife Matilda Jane Hartley.)

Lyman Andrus OVERSON--b. 11 May 1883, Leamington, Utah; d. 27 Aug. 1968,  
Delta, Utah; bur. 31 Aug. 1968, Leamington, Utah; md. 7 June, 1916, Salt  
Lake City, Utah to Harriet Alida ROBERTS, b. 25 Oct. 1894, Kanosh, Ut.;  
d. 11 Feb. 1931, Leamington, Utah; bur. 14 Feb. 1931, Leamington, Ut.;  
dau. of Charles Willis and Gertrude Lydia (MUNDY) ROBERTS.

Children:

1. Lea Gladys OVERSON--b. 12 Mar. 1917, Leamington, Ut.; md. 1st, 12 Nov.  
1942, Pioche, Nev. to Dean MACKELPRANG, b. 22 Feb. 1922, Cedar City,  
Utah, son of Joe and Eva (WOODALL) MACKELPRANG; md. 2nd, 9 Nov. 1951,  
Ogden, Ut. to Joe Celestino MONTOYA, b. 25 Mar. 1905, Lyden, New  
Mexico; son of Maxmeliano and Jauna (MARTINEZ) MONTOYA.

Children by No. 1:

1. Dean MACKELPRANG Jr.--b. 23 July, 1943, Delta, Utah; md.  
San Bernardino, Calif. to Kathy BUSSIER, dau. of Roy and Josephine  
(SCATURRO) BUSSIER.

Children:

1. Ginger Lynn MACKELPRANG--b. 30 Oct. 1969, San Bernardino, Cal.
2. Debbie Lea MACKELPRANG--b. 21 March, 1971, San Bernardino, Cal.

Children by No. 2:

1. Robert MONTOYA--b. 30 June 1952, Ogden, Ut.
2. Vickie Joy MONTOYA--b. ; md. , Ogden, Utah to Larry WHITE,  
b. 6 April 1952, Grand Saline, Texas, son of Herral and Barbara  
( ) WHITE.

Children:

1. Allan David WHITE--b. 10 July 1973, Okinawa, Japan.
2. Mark WHITE--b. 6 Sept. 1975, Ogden, Utah.

2. Joey Matilda OVERSON--b. 12 June 1919, Leamington, Utah; md. 1941,  
Reno, Nev. to CleMont BENNETT.

Children:

1. Grant CleMont BENNETT--b. 1 Sept. 1942; md. Doris DEKKER.

Children:

1. Gary BENNETT
  2. Darlene BENNETT
  3. Arlen William BENNETT--b. 21 Oct. 1974
2. Baby boy BENNETT
  3. Ferrel BENNETT, Twin.\*
  4. Merral BENNETT, Twin.\*
  5. Jolyne BENNETT, md. Rick ROWLEY of Parowan, Ut.
- \* Twin boys--d. 12 and 24 hours after birth.

3. Grant Lyman OVERSON--b. 19 June 1921, Leamington, Utah; d. 6 Feb.  
1966 in truck accident near Santaquin, Ut.; bur. Leamington, Ut.  
md. 24 Aug. 1949 to Ida JOHNSON, b. 11 Mar. 1920.

Children:

1. Allen Grant OVERSON--b. 13 Apr. 1950, Leamington, Ut. \* (See below.)
2. Alida Ruth OVERSON--b. 23 Sept. 1952, Leamington, Ut.
3. Scott Lee OVERSON--b. 6 Apr. 1954, Leamington, Ut.

\* Allen Grant md. Anne HIGGINSON of Nephi. they have a child.

1. Rushton OVERSON--b. 7 Apr. 1976, Nephi, Ut.

(Children of Lyman Andrus OVERSON, continued.)

4. Warren George OVERSON--b. 2 Aug. 1923, Leamington, Ut.; md. 4 Aug. 1950, Ely Nev. to Margaret Jennie ROSQUIST, b. 14 Apr. 1921, in Fountain Green, Ut.; dau. of John Odvin and Margaret Christina (THOMPSON) ROSQUIST.  
Children:  
1. Wayne Kent OVERSON--b. 12 Feb. 1951, Payson, Ut. (Twin) md. 1st Kori KUNURA, md. 2nd, Peggy VARNER.  
Child by No.1:  
1. Anthony Wayne OVERSON--b. 22 Mar. 1974, Salt Lake City, Ut.  
Child by No. 2:  
1. Travis OVERSON --b. 25 Dec. 1979.
2. Warren Brent OVERSON--b. 12 Feb. 1951, (Twin) Payson, Ut.
3. Karen Christine OVERSON--b. 21 Nov. 1953, Spanish Fork, Ut.; md. Ronald ZALOZNIK.  
Children:  
1. Carrie Jo ZALOZNIK--b. 24 Feb. 1973.  
2. Ronald Todd ZALOZNIK--b. 5 Jan. 1976 .
4. Mary Beth OVERSON--b. 6 Aug. 1955 Nephi. Ut.
5. Robert Jay OVERSON--b. 28 Sept. 1926, Leamington, Ut.; md. 15 Mar. 1946, Las Vegas, Nev. to Cathryn May BOSH, b. 19 Dec. 1926, Levan, Ut. dau. of Clifton Elroy and Jenny May (MORTENSON) BOSH.  
Children:  
1. Larry Jay OVERSON--b. 21 May 1947, Payson, Ut.  
2. Sharon OVERSON--b. 29 Sept. 1948, Cedar City, Ut.  
3. Margo OVERSON--b. 19 June 1951, Cedar City, Ut.  
4. Cathryn Lynn OVERSON--b. 6 Mar. 1954, Cedar City, Ut.  
5. Robert Leroy OVERSON--b. 12 July 1959, Cedar City, Ut.
6. Gertrude OVERSON--b. 29 Mar. 1929, Leamington, Ut.; md. 1st, 31 Aug. 1947, Delta, Ut. to Walton Le Grand LAW; md. 2nd, 17 Dec. 1966, Glendale, Calif., to Kenneth John LE CHEMINANT, b. 26 Aug. 1922, Ocean Pk. Calif. Son of William Wallace and Alice (WOODHOUSE), LE CHEMINANT.  
Children by No.1:  
1. Lorraine LAW--b. 10 July 1947, Delta, Ut.; md. 30 July 1965 San Bernardino, Calif.; to Larry Eugene COLPITTS, b. 17 Aug. 1939, Anton, Colo.; son of Francis Kenneth and Pearle (MILLER) COLPITTS.  
2. Sue Carole LAW--b. 10 Nov. 1950, San Bernardino, Calif.; md. 25 Mar. 1967, Las Vegas, Nev. to Larry James THOMPSON, b. 17 May 1949, Lynwood, Calif.; son of Marvin Vistrup and Luella Mae (SMITH) THOMPSON.  
Child:  
Tamra Jean THOMPSON--b. 25 Aug. 1967, San Bernardino, Calif.
3. Jolane LAW --b. 14 Dec. 1952, San Bernardino, Calif.
4. Karen Louise LAW--b. 18 Aug. 1954, San Bernardino, Calif.  
Children by No. 2:  
1. Michelle O. LE CHEMINANT--b. 31 Jan. 1969, Glendale, Calif.

This concludes the descendants of Lyman OVERSON, to the best of my knowledge, although by no means complete, but I sincerely appreciate those who contributed what they knew of the family.--E.L.B.

MATILDA JANE HARTLEY'S FAMILY  
(CHRISTIAN OVERSON'S SECOND WIFE)

Samuel HARTLEY--b. about 1808, Sheffield, Yorkshire, England; md.  
Eliza GILL, b. 28 Nov. 1815, Sheffield, Yorkshire, England, d. 17 Nov.  
1891, Oak City, Ut.  
Children:

1. Sarah Wells HARTLEY--b. 10 Aug. 1836, Sheffield, Yorkshire, Eng.; md.  
Lyman CURTIS, b. Sheffield, Eng.

Children:

1. Charley CURTIS--of Sheffield, Eng.
2. Emma CURTIS--of Sheffield, Eng.; md. HANKS.
3. Millie CURTIS--of Sheffield, Eng.; md. SMITH.
4. Dr. A.C. CURTIS--of Sheffield, Eng.

2. Clementine HARTLEY--b. about 1837, Sheffield, Eng.; died young.
3. Matilda Jane HARTLEY--b. 14 Sept. 1838, Sheffield, Eng. (See Page 43)

4. Robert Gill HARTLEY--b. 1840, Sheffield, Eng.

5. Samuel HARTLEY--b. 14 Jan. 1842, Sheffield, Eng.; d. unmd. 19 June  
1895, Leamington, Ut.

6. Lucy Josephine HARTLEY--b. about 1845, Sheffield, Eng.; md. Thomas ZUNDEL, of Sheffield, Eng. They adopted or raised an Indian boy who was killed.

7. Farewell HARTLEY--b. 19 Sept. 1848, Sheffield, Eng.; d. 2 May 1919;  
md. \_\_\_\_\_.

Children:

1. Eliza E. HARTLEY--b. 2 Jan. 1884; md. Joseph ANDERSON. Eliza died  
20 Oct. 1966.

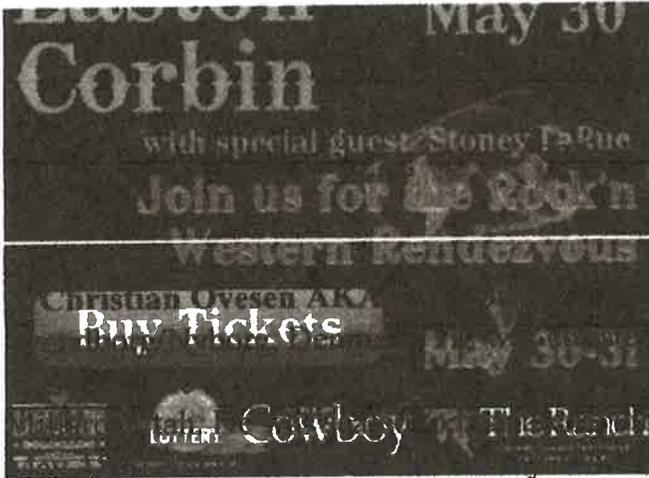
2. Lillie HARTLEY
3. Fred HARTLEY

8. James Lorenzo HARTLEY--b. about 1850

We often stayed at the home of Eliza and Joseph Anderson's home at Conference time in Oak City. She always had a table full of good things to eat, and we felt always very welcome. I remember the three story home they had and the sacks of freshly washed wool they gave us to use as pillows for the night, and how soft and warm they were, and although we slept on the floor we were very comfortable.

\* \* \* \* \*

The truly hospitable is the truly wise, because he loves others and is most  
blest. - - - - Holme



## Christian Ovesen AKA Overson

### Generation

on 11 Jun 1840 in Mareskov, Herrested,  
ed on 19 Jul 1840 in Vindinge, Herrested, Svendborg,  
ant, Sanpete, Utah. He was buried in Leamington,  
5 May 1950 in the Salt Lake temple. He was baptized in  
the Endowment House temple.

[x] close

[Notes]

Christian married (1) **Jensine Christine Jensen** on 16 Nov 1862 in Mt Pleasant, Sanpete, Utah. They were sealed on 4 May 1874 in the Endowment House temple. Jensine was born on 1 Jun 1841 in Fredrickshaven, Hjorring, Denmark. She died on 19 Sep 1879 in Oak City, Millard, Utah. She was buried in Sep 1879 in Oak City, Millard, Utah. She was baptized in 1856. She was endowed on 4 May 1874 in the Endowment House temple.

They had the following children:

- 2 F i **Gertie Overson** was born in 1861 in Elling, Hjorring, Denmark. She died in 1861. She was sealed to her parents on 12 Nov 1953 in the Manti Utah temple. Because She died as a child, baptism is not necessary.
- + 3 M ii [Joseph Overson](#)
- 4 M iii **Hyrum Fredrick Overson** was born on 11 Aug 1865 in Deseret, Millard, Utah. He died on 1 Nov 1928. He was sealed to his parents on 12 Nov 1953 in the Manti Utah temple. He was baptized in Jul 1876. He was endowed on 10 Nov 1953 in the Manti Utah temple.
- 5 F iv **Emma Overson** was born on 23 Apr 1868 in Deseret, Millard, Utah. She died on 2 Feb 1957. She was sealed to her parents on 12 Nov 1953 in the Manti Utah temple. She was baptized in Jul 1876. She was endowed on 3 Apr 1884.
- 6 F v **Mary Anna Overson** was born on 17 Dec 1871 in Oak City, Millard, Utah. She died on 27 Aug 1874. She was sealed to her parents on 12 Nov 1953 in the Manti Utah temple. She was baptized on 30 Apr 1953. She was endowed on 10 Nov 1953 in the Manti Utah temple.
- 7 F vi **Sina C. Overson** was born on 25 Jul 1874 in Oak City, Millard, Utah. She died on 27 Aug 1874. She was born in the covenant. Because She died as a

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child, baptism is not necessary.

- 8 M vii **James Christian Overson** was born on 10 Jan 1876 in Oak City, Millard, Utah. He died on 19 Nov 1937. He was born in the covenant. He was baptized on 7 Aug 1942. He was endowed on 8 Sep 1942.

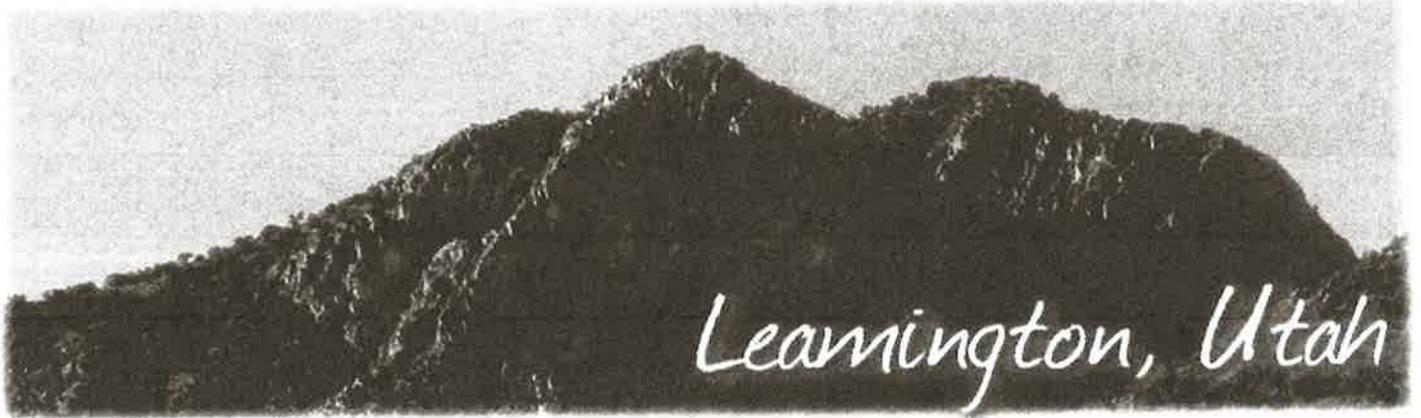
Christian married (2) **Matilda Jane Hartley** on 11 Apr 1880. Matilda was born on 14 Sep 1838 in Sheffield, Yorkshire, England. She died on 7 Oct 1916 in Leamington, Millard, Utah. She was buried in Oak City, Millard, Utah. She was born in the covenant. She was baptized on 4 Jul 1889.

They had the following children:

- 9 F viii **Sarah Josephine Overson** was born on 28 Feb 1881 in Leamington, Millard, Utah. She died on 5 Dec 1955 in San Francisco, California. She was born in the covenant. She was baptized in Jun 1889.
- 10 M ix **Lyman Andrus Overson** was born on 11 May 1883 in Leamington, Millard, Utah. He died on 27 Aug 1968 in Delta, Millard, Utah. He was born in the covenant. He was baptized on 2 Jul 1891. He was endowed on 11 Jul 1930.

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The town of Leamington on the northern border of Millard County is situated in a small but fertile valley of the winding Sevier River. It is surrounded on the north, east, and south by the Wasatch range.

In 1871, a number of people from Oak City visited the present site of Leamington. Unlike other Utah settlements, these people were not sent to Leamington by Church authorities. However, Bishop Platt Lyman of Oak City did send John Lovell to Leamington to act as the presiding elder. The first permanent settlers in Leamington built their home in 1873.

Leamington was named after a town in England by Frank Young, a nephew of Brigham Young who was one of the early settlers in Leamington.

Leamington is located on the south side of the Sevier River. The settlement extends about five miles up and down the river, the upper end being the mouth of Leamington Canyon. The river flows west, coming from the northeast. The town center is where the schoolhouse stand and is about three miles below the mouth of the canyon. Leamington is 30 miles northeast of Oasis, 25 miles southwest of Juab, 46 miles from the county seat Fillmore, 12 miles north of Oak City, and 131 miles southwest of Salt Lake City.

The early settlers came to farm and ranch of their own accord. In the autumn of 1871, the group from Oak City built a small dam across the river near the present day Leamington, which, unfortunately, washed away the following day. In 1872, a second dam was constructed based on a survey done by Thomas Morgan. This dam was a little more successful than the first and made possible the settlement of Leamington by Thomas Morgan and those who helped build the dam.

The second dam was not without problems, though. It broke each year causing great frustration to the settlers. At last, an existing ditch was extended further up the river to a point where the river could be tapped without the assistance of a dam.

The first Leamington settlers found the riverbanks a mass of willows and brush. Grass covered the hills so thick and tall that flood waters could not wash holes or gullies in the ground.

Among the first settlers were Joe Weach, Thomas Morgan, Ole Jensen, John Radford, Richard Ross, Mell Ross, Niels Mortensen, Lars Nielson, Harry Millet, Christian Overson, John Dutson, Charles and John P. Johnson, Thomas and John Talbot, and Frank Young. All of these people settled in Leamington prior to 1880.

The following came shortly after 1880: Alexander Graham, James Latimer, Joe Saunders, and John McCombie.

Within a few years after the first settlement, the community numbered 100. Richard Pay started a store and a saloon. George Morrison and Christian Overson both started stores. Overson also ran the post office and was the station agent. Charlie Johnson installed a store in his home.

The railroad came through the valley in 1879. At this time the population had increased to about 150. In 1888, twenty teams left the town and went to Idaho. The farms of those who left were largely purchased by other farmers who came to

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### Leamington, UT

*Ovelson Family*

The town of Leamington on the northern border of Millard County is situated in a small but fertile valley of the winding Sevier River. It is surrounded on the north, east, and south by the Wasatch Range. Leamington is a small agricultural town with a population of around 200 people. There are between 65 and 75 houses in town. Leamington was named after a town in England.

In 1871, a number of people from Oak City visited the present site of Leamington to consider development of a town. In the autumn, in order to prepare a water supply for agriculture, the group built a small dam across the river near the present day Leamington. The following day it washed out. In 1872, a second dam was constructed. The second dam was not without problems. It broke each year causing great frustration to the settlers. At last, an existing ditch was extended further up the river to a point where the river could be tapped without the assistance of a dam.

Permanent settlers arrived to build the first home in 1873. The first house was made of logs. Others were made of logs or cedar posts. Some houses were moved in from Oak City, one of which was built of quaking aspen logs and was later plastered over.

Within a few years after the first settlement, the community numbered 100 and had several stores, a post office and a saloon. The railroad came through the valley in 1879. At this time the population had increased to about 150.

Today, a refurbished log cabin stands in the Leamington city center.

### Oak City, UT

Oak City is a small agricultural town snuggled up against the west side of Blue Mountain in northeast Millard County. As of the census of 2000, there were 650 people, 167 households, and 140 families residing in the town.

The settlement of Oak City was begun in late summer of 1868, when a few families moved there from the community of Deseret, Utah. They chose this area to settle because of the reliable creek and the quality of the land for farming.

Most of the houses in Oak City are made of adobe, but have been covered over with siding. Oak City is said to be one of the best remaining examples of an LDS Church sanctioned and planned settlement. Oak City was originally settled on the concept of the United Order--a communal living model established by early Mormon leader Brigham Young.



Oak City has a total area of 0.7 square miles.

Tilford family

By 1881 the town contained two stores, one hotel, one restaurant, one livery stable, a blacksmith shop, and other places of industry. The buildings were constructed mostly of wood. A frame school house with a seating capacity of thirty had been erected.

Lack of water to wash the gravel initially hindered development. Eventually water supply ditches were created bringing water from a great distance.

At peak times between 1873 and 1877 as many as 400 miners worked claims employing pans, rockers, and arrastras to recover the ore. By 1878, a small five-stamp mill was pressed into service, the same year the district got its post office.

Osceola has gained at least three distinctions: its pioneering use of hydraulic hoses in the 1880s, a \$46,000 nugget (reportedly Nevada's largest) that was found in 1886, and most important, it survived longer than any other placer camp in Nevada.

Gold discoveries had dwindled by the beginning of the 20th century but phosphate rock was discovered nearby in 1917, and lead ore shipped in 1918. In 1921, the Sunrise property operated a 2-stamp mill and the American Group a 10-stamp mill, producing gold bullion with a little silver content.

Various individuals continued working the claims. The post office finally closed December 15, 1920 when Baker became the mail address for its patrons. Today there are two or 3 residents in the area and some very small scale recovery of gold still takes place. Reasonable seasonal accessibility and the interest of a local cemetery recommends this area for light interpretation and promotion within the GBNHA.



Early Photo of Osceola

**Ward, NV-- Mining District Ghost Town of Ward & Cemetery**

Located a few miles east of Ward Charcoal Ovens State Park is the Ward Mining District. Nevada Historical Marker 54 along Route 50, about 13 miles to the northeast states this about the district:

*To the west of you, in the foothills of the Egan Range, lie the Ward Charcoal Ovens; and five miles north from there the ghost town of Ward.*

*A million dollars worth of silver was taken from a single chamber of the Ward mine. The boom lasted from 1872 to 1882.*

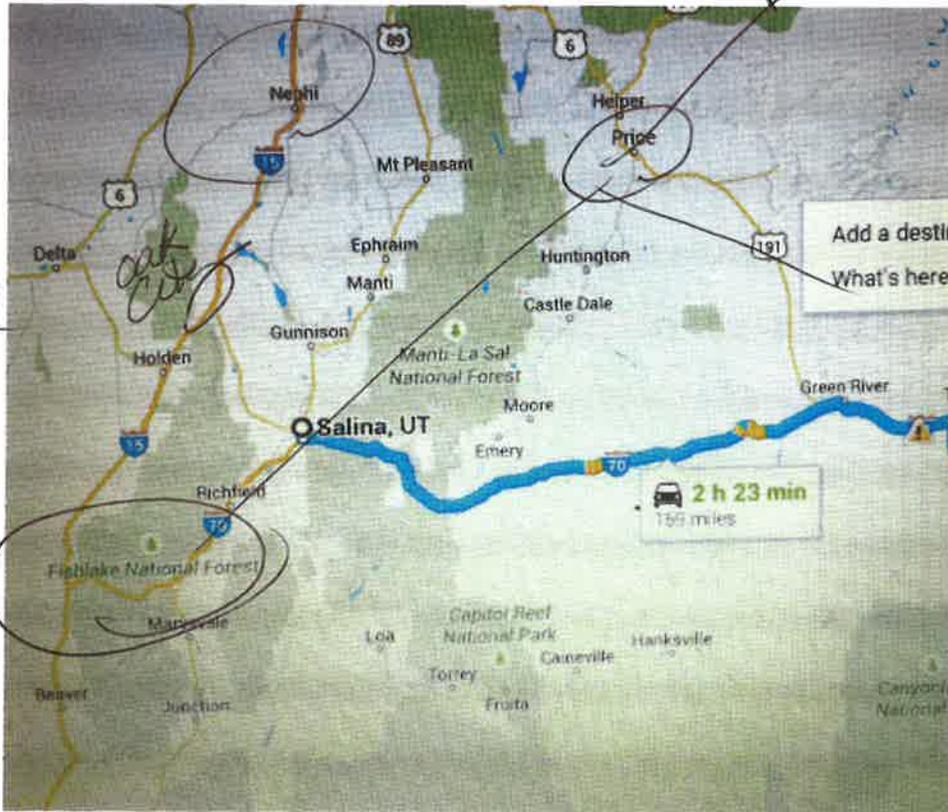
40

Salt Lake

Price

Great Basin Nat. Park

Fishlake



Add a destination  
What's here?

2 h 23 min  
155 miles

# Nevada, by Mark Twain

Country forums / United States of America / United States

## geoffw

22:48 UTC  
31 Jul 2007

I'm reading Twain's "Roughing it", the following is an extract. Is it true? Does it still hold? Any explanations?

At the border of the Desert lies Carson Lake, or The "Sink" of the Carson, a shallow, melancholy sheet of water some eighty or a hundred miles in circumference. Carson River empties into it and is lost--sinks mysteriously into the earth and never appears in the light of the sun again--for the lake has no outlet whatever.

There are several rivers in Nevada, and they all have this mysterious fate. They end in various lakes or "sinks," and that is the last of them. Carson Lake, Humboldt Lake, Walker Lake, Mono Lake, are all great sheets of water without any visible outlet. Water is always flowing into them; none is ever seen to flow out of them, and yet they remain always level full, neither receding nor overflowing. What they do with their surplus is only known to the Creator.

## maxim1910

22:59 UTC  
31 Jul 2007

I believe Carson lies at the Western edge of the "Great Basin" - no rivers flow out of the Great Basin, not above ground at least. The Great Basin encompasses most of Nevada and Western Utah and a bit of Eastern California. Water flowing into the Great Basin from the surrounding mountain ranges either evaporates or goes sub-surface (sinks), hence the name "Great Basin". Great Basin National Park (Eastern Nevada) is pretty neat if you ever get a chance to visit; you get everything from the most hostile burnt-over desert to alpine forests and lakes, due to the elevation change.

## jlawrence01

00:45 UTC  
01 Aug 2007

A good book on Nevada is the Moon Guide to Nevada by Deke Castleman. He takes a lot of time talking about the geography of the state of Nevada.

## jlawrence01

00:46 UTC  
01 Aug 2007

A good book on Nevada is the Moon Guide to Nevada by Deke Castleman. He takes a lot of time talking about the geography of the state of Nevada.

## ecocamper

01:33 UTC  
01 Aug 2007

Mark Twain is read for his rhetoric - not scientific observations.

## flagstuff

02:08 UTC  
01 Aug 2007

And yet what keen observer he is. perhaps not a scientist, but an observer of a high order.

**boinkity\_boink**02:16 UTC  
01 Aug 2007

Ha. I'm reading that book too.

6

**boinkity\_boink**02:16 UTC  
01 Aug 2007

I've just finished Slade's hanging.

7

**yaralin**02:26 UTC  
01 Aug 2007

unless there's another mono lake, it's in california, not nevada. it's true that water does not flow out of it. you can read more about the geography of it [here](#). wikipedia is full of info on all this stuff for you. [great basin carson sink](#)

8

*i don't logically see why water would continually flow in and the water level not rise. the only way that would happen is if it's either draining out and/or evaporating at a rate equal to water flowing in.*

**mlm192**04:48 UTC  
01 Aug 2007

A similar phenomenon occurs in the area around Craters of the Moon National Monument of southcentral Idaho. Craters of the Moon contains huge lava beds, which are very porous. As rivers flow over this lava, the waters filter down into the lava--and the rivers go dry. These are called the "lost rivers" for this reason.

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However, they don't just disappear underground. They flow for 200 miles beneath the surface, only to reappear as they shoot out of the walls of the Snake River Canyon. The journey takes about 200 years to go from Craters to the Snake River. By that time, having been filtered by the lava, the water is crystal clear.

This area along the Snake River, known as Thousand Springs, is much diminished by various agricultural uses. Most of the springs have disappeared, so the area is not as dramatic as it once was. But you can still see the crystal clear waters and beautiful waterfalls in a couple of protected areas, like Ritter Island and especially Box Canyon State Park.

**zeldasad**06:45 UTC  
01 Aug 2007

*Roughing It* is hysterical. I think it is also the only well-known account of the Old West that never became a TV show or a movie. The reason is obvious. You never quite know when Clemens is giving you a straight story and when he is telling a "tall tale." If Hollywood had ever tried to do *Roughing It*, there would have been one of two outcomes. First, they would have ruined the stories and it would have flopped. Second, had they been faithful to the book every western that followed it would have flopped. No one would have taken the succeeding westerns seriously. I guess the world is safe from a *Roughing It* western today because the book is much too "politically incorrect." No one in Hollywood would be caught dead with it. Hollywood doesn't make westerns any longer in any case. *Roughing It* remains classic American humor by THE classic american author.

10

If you don't know where you're going, any road will take you there. - Lewis Carroll

**nicksun**

08:03 UTC

Twain's "Roughing it" had the reference about needing a coat in San Francisco in the summertime, doesn't it? And it being "eternal summer" in

11

01 Aug 2007

Sacramento?

**caldor1**10:23 UTC  
01 Aug 2007

&lt;Geography Lesson&gt;

Here is what happens, all the rivers draining off the eastern side of the Sierra Nevada Mountain Range flow east, in to the Great Basin. The Carson River flows east out past Carson City and then east towards Fallon, NV. Past that it flows in to the Carson Sink, which is in fact a large salt flat, that sometimes fills with a few feet of water. The rate of evaporation is almost always higher than the rate of input, so most of it is dry (at least at the surface). During really wet years it becomes a large shallow lake. The Great Salt Lake in Utah is the same thing, except the input from rivers running out of the Wasatch Range provides enough water to generally keep it a lake. Some really wet years though its level does come up a lot, and during dry years can recede dramatically.

The water from all the inland draining rivers in the Great Basin doesn't run to the ocean even underground. Most of it evaporates, but the little that doesn't slowly ends up in the water table of the valleys across the Great Basin. This makes sense when you look at Death Valley, Bad Water is the end of the Amargosa River (usually dry), and its below sea level. The water runs in, but can't escape. Usually theres a small amount near the surface at Badwater itself. As the water evaporates, it leaves behind any minerals in it. This is primarily salt, hence how these flats become 'salt flats'.

Even Lake Tahoe runs in to the Great Basin, via the Truckee River and never makes it to the ocean.

The only exception to this is man-made, such as canals transporting water from Mono Lake to Los Angeles for city use, etc.

&lt;/Geography Lesson&gt;

**geoffw**14:27 UTC  
01 Aug 2007

Thanks for the geography lessons. I haven't laughed so much reading a book in a long time. He really gives it to the Mormons.

**pleistocenemegafauna**19:01 UTC  
02 Aug 2007

"Mark Twain is read for his rhetoric - not scientific observations. "

I think it no stretch of the imagination to believe his observations correct. Decades of low precipitation are a common environmental feature of the Great American desert as are the periodic droughts. Chances are Twain lived here during just such a period, local knowledge was only decades old and had never witnessed the lakes during a prolonged drought. Early settlers based their geologic and environmental knowledge on Europe. Rivers flowing into shallow basin lakes with no outlet and a stable water level due to evaporation would have been little understood. The idea that water could flow in and not have a visible exit was indeed a mystery.

Carson, Humboldt, Walker, Mono are remnants of extensive Pleistocene lakes that covered northwest Nevada eastern California and southeast Oregon. The largest is known as Lake Lahontan. The whole of the great basin at this time was sprinkled with lakes that we think of today only as sinks, salt flats, or playa. Even in this sadly desicated state they are incomparable wonders. Without them mysterious military installations would be as boring as Fort Dix, burning man a beach party campfire that guttered out in 89 and alien contact nothing but a dream.

**vinnyd**20:34 UTC  
02 Aug 2007

"The idea that water could flow in and not have a visible exit was indeed a mystery."

Except to those few of Twain's contemporaries who had seen a copy of the Bible and were familiar with the concept of the Dead Sea.

15

**ethelred**20:48 UTC  
02 Aug 2007

&lt;blockquote&gt;Quote

<hr>The only exception to this is man-made, such as canals transporting water from Mono Lake to Los Angeles for city use, etc.<hr></blockquote>  
Mono Lake was a salt lake before LA started diverting water, though. The diversions increased the salinity and lowered the lake level.

16

**pleistocenemegafauna**20:18 UTC  
05 Aug 2007

"Except to those few of Twain's contemporaries who had seen a copy of the Bible and were familiar with the concept of the Dead Sea."

The Genesis story of Sodoms destruction is the longest passage the Dead Sea rates in the King James Bible. Little help for Nevada's cultural elite of the 1870s trying to understand natural phenomena. Who would have thought.

17

**vinnyd**20:28 UTC  
05 Aug 2007

#17 – See Ezekiel 47, for starters.

18

**pleistocenemegafauna**10:11 UTC  
07 Aug 2007

I did. Your telling me Nevadans of the 19th century read that passage, understood it and applied to their own geographic reality? Your dreaming o.u.g  
Vinny as Twains passage confrims.

As you know, because this is a travel site and you being an intrepid traveler, have stayed at the EG Kibbutz hostel, hiked the wadis, swam in Ein Gedis pools and had a beer in the 'lowest bar in the world' (the basement bomb shelter/beer bar at a dead sea cafe) the description given in verse has not been accurate since the middle ages.

If you didn't you just haven't traveled enough. Get out there Vin make us proud.

19

**nutraxfornerves**16:35 UTC  
07 Aug 2008

Mark Twain never said that the coldest winter he ever spent was a summer in San Francisco. But he did write about SF's climate in *Roughing it*.  
>The climate of San Francisco is mild and singularly equable. The thermometer stands at about seventy degrees the year round. It hardly changes at all. You sleep under one or two light blankets Summer and Winter, and never use a mosquito bar. Nobody ever wears Summer clothing. You wear black broadcloth—if you have it—in August and January, just the same. It is no colder, and no warmer, in the one month than the other. You do not use overcoats and you do not use fans. It is as pleasant a climate as could well be contrived, take it all around, and is doubtless the most unvarying in the whole world. The wind blows there a good deal in the summer months, but then you can go over to Oakland, if you choose—three or four miles away—it does not blow there. It has only snowed twice in San

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Francisco in nineteen years, and then it only remained on the ground long enough to astonish the children, and set them to wondering what the feathery stuff was.

During eight months of the year, straight along, the skies are bright and cloudless, and never a drop of rain falls. But when the other four months come along, you will need to go and steal an umbrella. Because you will require it. Not just one day, but one hundred and twenty days in hardly varying succession. When you want to go visiting, or attend church, or the theatre, you never look up at the clouds to see whether it is likely to rain or not—you look at the almanac. If it is Winter, it will rain—and if it is Summer, it won't rain, and you cannot help it. You never need a lightning-rod, because it never thunders and it never lightens. And after you have listened for six or eight weeks, every night, to the dismal monotony of those quiet rains, you will wish in your heart the thunder would leap and crash and roar along those drowsy skies once, and make everything alive—you will wish the prisoned lightnings would cleave the dull firmament asunder and light it with a blinding glare for one little instant. You would give anything to hear the old familiar thunder again and see the lightning strike somebody. And along in the Summer, when you have suffered about four months of lustrous, pitiless sunshine, you are ready to go down on your knees and plead for rain—hail—snow—thunder and lightning—anything to break the monotony—you will take an earthquake, if you cannot do any better. And the chances are that you'll get it, too.

He did write in *Roughing It*

>I have elsewhere spoken of the endless Winter of Mono, California, and but this moment of the eternal Spring of San Francisco. Now if we travel a hundred miles in a straight line, we come to the eternal Summer of Sacramento.

Edited by: nutraxfomerves

**ethelred**  
19:58 UTC  
07 Aug 2008

Great excerpt in #21... such a good writer that I can *almost* forgive him for disliking Mono Lake so much.

21

# High Country News

FOR PEOPLE WHO CARE ABOUT THE WEST

## Utah's ancient Lake Bonneville holds clues to the West's changing climate

Douglas FOX | Nov. 7, 2011 | *From the print edition*

A curious horizontal line runs across the range -- a notch cut into the mountains like a railroad bed, visible from many miles away. It snakes around every gully and ridge, 600 feet above the playa where the Donners hauled their wagons. Floating Island Mountain, visible to the east above a perpetual mirage, also shows this line. The same thing can be seen across much of Utah, inscribed into every mountain and hill like a celestial constant.

That line records the shores of a massive lake, called Lake Bonneville, which once sprawled across the region. You can spend half a day driving across Bonneville's dusty beds on Interstate 80, beneath hundreds of feet of vanished water, without ever coming up for air. The lake's irregular tendrils stretched for 150 miles east-west and 250 miles north-south; it covered modern-day Salt Lake City and reached across the Nevada and Idaho borders. "This thing used to be the size of Lake Superior," says Jay Quade, a University of Arizona geologist who has spent much of his life exploring these deserts. "It was an inland ocean."

The sagebrush, rabbitbrush and Mormon tea that grow here today subsist on just five inches of rain a year. But as Quade climbs a gully on the west flank of the Silver Island Range, some strange shapes loom into view -- apparitions of a wetter past. In one place, hundreds of stone fingers protrude from the rock like branching coral. Elsewhere, a row of turrets resembling tropical sea sponges clings to the

gully's walls, their beige shapes conspicuous against the gray background. Their curves vaguely evoke a living, aquatic origin. The same stuff drapes, petrified and cracking, over the crests of nearby ridges like a six-inch layer of mud.

This spongy stone, called tufa, was laid down by algae. "This whole area was covered in algal soup," says Quade. Today, it sits 600 to 800 feet above the dusty plains that surround these mountains, but for thousands of years those algal mats basked in sunlight just below the water's surface. The Silver Island Range was truly an island; only its upper slopes rose above the water.

The rise and fall of seas seems like something that could only have happened far back in geologic time -- hundreds of millions of years ago, in a world populated by unrecognizable life forms. But Bonneville's waves lapped against these shores a mere 15,000 years ago. Human beings saw the dwindling lake when they arrived in the Great Basin 1,000 years later. This place has hardly changed since then. You can still see stones as small as a fist, draped in algal tufa, that haven't moved an inch since the inland sea evaporated thousands of years ago.

Scientists have studied Bonneville for decades, often for the pure joy of piecing together a mystery. But these days, the study of Bonneville is taking on new urgency. Climate models predict that the American West will become drier as global temperatures rise, but no one knows how much drier -- whether droughts will be merely a minor inconvenience, or catastrophes that could depopulate the likes of Salt Lake City, Las Vegas or Phoenix. "Predicting what's going to happen with rainfall is very tricky business," says Wallace Broecker, a prominent climatologist at Lamont-Doherty Earth Observatory in New York. "We still don't do it very well."

This is where Bonneville comes in. It provides a window into the past -- and possibly the future. As the last ice age wound down 30,000 to 10,000 years ago, temperatures seesawed wildly. Lake Bonneville is a perfect place to study how wetness in the Great Basin changed as a result of those temperature swings: The lake's water levels rose and fell by hundreds of feet during this time. Quade and his

fellow geologists have come to the Silver Island Range to read this record of shifting moisture. Their initial results are not reassuring: As the West warms up, it will likely become substantially drier than it is today.

Europeans probably noticed Bonneville's high-and-dry shores the first time they visited the Great Basin, but it has taken 200 years for people to accept the idea of an inland sea.

In 1853, Edward Griffin Beckwith, a U.S. Army lieutenant, led an expedition to Utah to map routes for the transcontinental railroad. The dry shoreline, he wrote, "attracted the observation of even the least informed teamsters of our party -- to whom it appeared artificial." *because it was unlike anything*

Beckwith theorized that an arm of the Pacific Ocean had once reached deep into North America to form those shores. It was a radical idea. The bottom of the lake sat 4,000 feet above sea level -- a fact that Beckwith was well aware of -- so the continent would have had to have risen nearly a mile to reach its present elevation. But to Beckwith that probably seemed less outlandish than the only other alternative -- the possibility that the Utah desert once received so much rain and snow that it drowned in 900 feet of water.

\* Grove Karl Gilbert, a scientist with the U.S. Geological Survey, dispelled the idea that the Pacific had invaded Utah. Gilbert spent most of the 1870s exploring the Great Basin, and his men mapped 500 miles of Bonneville's shores using surveying telescopes. They found multiple concentric rings of shorelines up and down the mountains, formed as the lake rose and fell. They showed that Bonneville was hemmed in by mountains on all sides -- except at one point. Thirty miles north of the Idaho border, they found a spot where Bonneville had poured through a mountain saddle into Idaho's Snake River Valley -- and ultimately into the Pacific. The lake overflowed at this point for around 500 years. But then a catastrophe occurred 18,000 years ago. The waters pouring through this mountain saddle eroded their way through rock into a soft layer of gravel below. Lake Bonneville burst its geologic waistband.

Within days, the water chewed a channel 350 feet deep in the soft, underlying strata -- unleashing a flood 40 times greater than the flow of the Mississippi River. Over 1,200 cubic miles of water gushed out over the next few weeks, overflowing the Snake River Canyon, blasting soil from bedrock and rolling boulders -- some the size of automobiles -- for 200 miles downstream. Bonneville's water level dropped by 350 feet, to the depth of the newly cut channel. The lake stayed at that level for another 2,000 or so years before slowly receding another 550 feet -- down to the level of the modern Great Salt Lake.

Jack Oviatt, a geologist at Kansas State University, has spent 35 years carbon-dating snail shells, driftwood and algal tufa rocks at the lake's various shorelines to assemble the timeline of these ups and downs. That history provides a good framework, but refining it further will help scientists do a better job of reconstructing the climate. "We know the general picture, but we don't know the rates of change between these lake stands," says David McGee, a geologist post-doc from the University of Minnesota who is studying Bonneville along with Quade and several others. "We don't know the responses of the lake to big, sudden climate shifts."

Even as the great ice sheets started retreating around 25,000 years ago, temperatures in the Northern Hemisphere went through a series of dramatic swings: rapid cooling during so-called Heinrich Events, when ice sheets dropped armadas of icebergs into the North Atlantic and caused it to cool, followed by heat waves when temperatures in Greenland soared by as much as 15 degrees Fahrenheit over just a few decades. Knowing how Bonneville and other ancient lakes responded to these swings would enable scientists to build climate models with a better chance of predicting what will happen to rain and snowfall in the West over the next 100 years.

Unfortunately, Bonneville's shorelines provide only fragmentary evidence of the lake's status at specific points in time. What Broecker has long sought is a continuous record of its changes. Tree rings provide this kind of smooth record, but they generally don't go back further than several thousand years -- whereas the

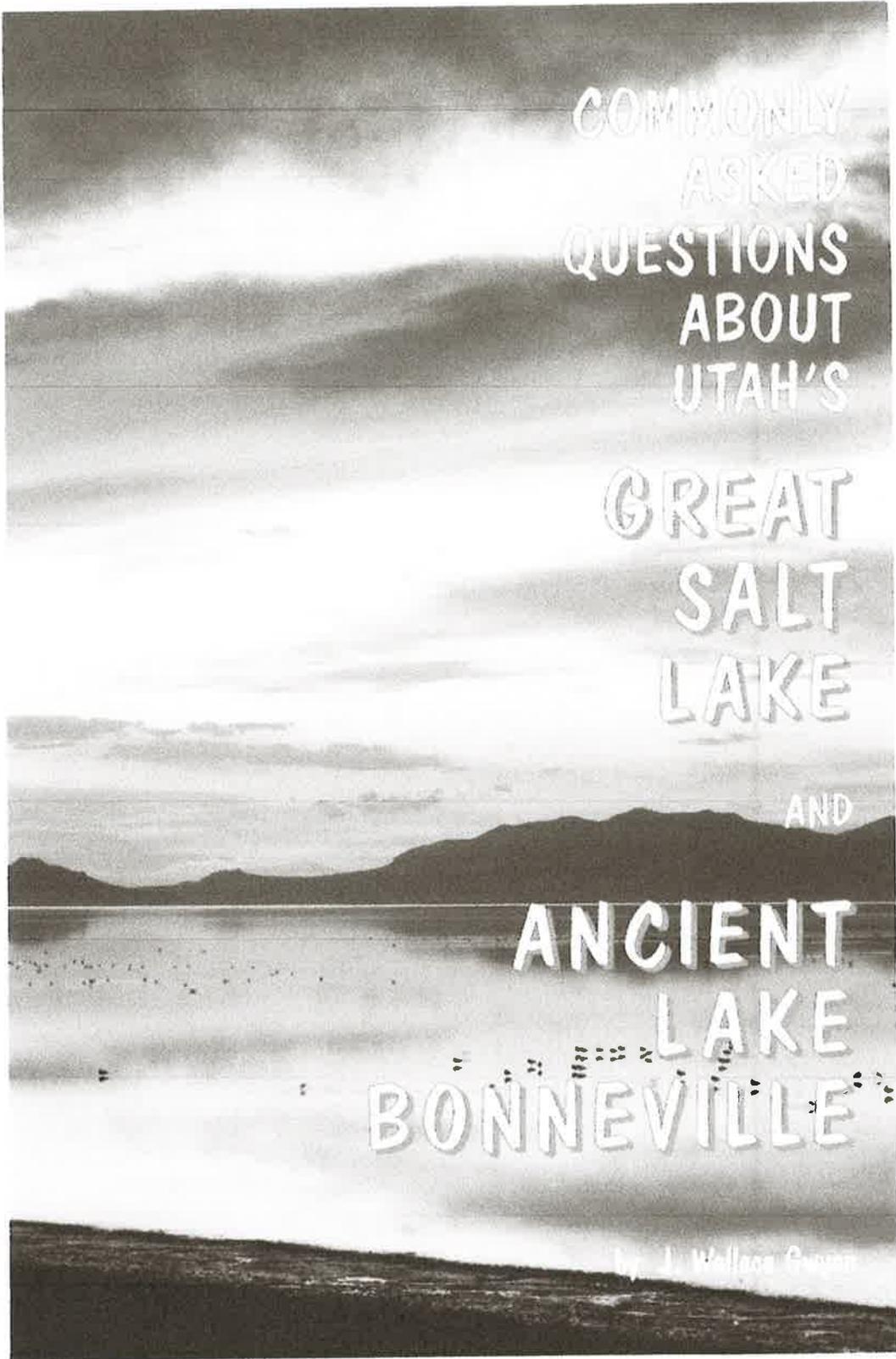
most interesting parts of Bonneville's history happened in the more distant past. In 2007, Quade, a longtime friend of Broecker's, found the solution in an unlikely place.

That fall, Quade was busy moving his research lab from one building to another. As he sorted boxes, he came across a canvas sack inside a rat-gnawed wooden chest. Inside the sack, he found several hunks of dingy yellow-white layered crystalline stone in Ziploc bags. Quade had pried them from the walls of a cave in northern Utah in 1994. Back then, they were a mere curiosity -- the kind of pure carbonate crystals that only seem to grow in dark nooks and crannies. Quade brought them home, stashed them in the trunk, and forgot about them. But by the time he rediscovered them in 2007, they had become valuable clues for deciphering Bonneville's history and the story of how water in the West responded to temperature changes in the past.

Those rock layers were laid down as Lake Bonneville rose and flooded the cave. The calcium, magnesium, iron, and carbonate in the water gradually precipitated out of it and coalesced into crystals -- much as mineral deposits form bathtub rings. The layers represented thousands of years of history compressed into six inches. New methods of analysis would allow that history to be read at an accuracy of 30 to 50 years -- 10 times better than would have been possible with standard radiocarbon dating. If Quade could find those same mineral bathtub rings in other caves around Utah, then he could build the most detailed account yet of how Bonneville contracted and expanded as temperatures rose and fell.

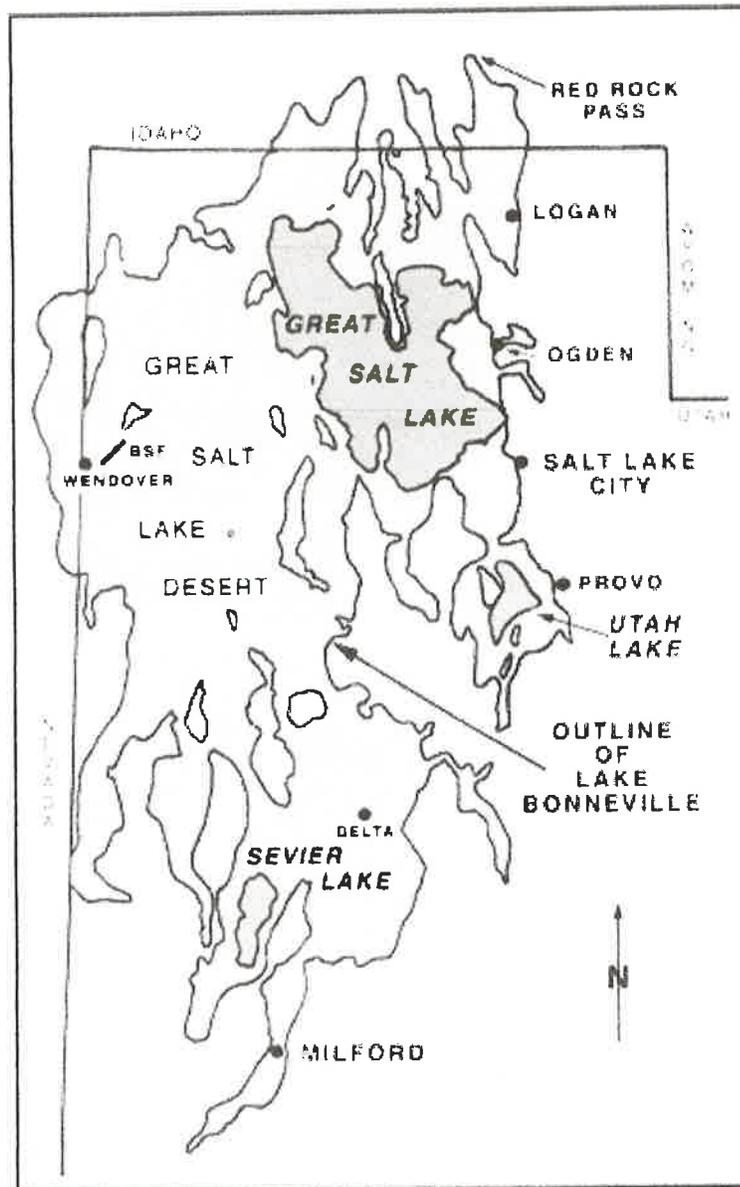
Broecker helped Quade snag funding for the project from the National Science Foundation. Quade teamed up with David Madsen, the archaeologist from the University of Texas at Austin who first brought him to the cave where he found the minerals in 1994. He also connected with Broecker's former Ph.D. student, McGee.

The group visited the Silver Island Range this spring in search of more bathtub rings. They spent nights in Wendover, a town on the Nevada-Utah border with a split personality, where a 50 foot-tall cowboy in flashing red lights welcomes you



## Lake Bonneville

Where was Lake Bonneville, how large was it, and when did it exist? What were Lake Bonneville's dimensions, and what was it like?



Lake

*Outline of ancient Lake Bonneville and associated modern features.  
(BSF = Bonneville Salt Flats).*

Bonneville was a large, ancient lake that existed from about 32 to 14 thousand years ago. It occupied the lowest, closed depression in the eastern Great Basin and at its largest extent covered about 20,000 square miles of western Utah and smaller portions of eastern Nevada and southern Idaho.

At its largest, Lake Bonneville was about 325 miles long, 135 miles wide, and had a maximum depth of over 1,000 feet. It contained many islands that are the present-day mountain ranges of western Utah. Its relatively fresh water was derived from direct precipitation, rivers, streams, and water from melting glaciers. During the time of Lake Bonneville, the climate was somewhat wetter and colder than now.

## When and at what elevations were the terraces along the mountains made by Lake Bonneville?

Three major shorelines were left by Lake Bonneville, and one by the Great Salt Lake.

The Provo and Bonneville shorelines of Lake Bonneville can be seen as terraces or benches along many mountains in western Utah. The Stansbury shoreline of Lake Bonneville and the Gilbert shoreline of the Great Salt Lake are less obvious, and are found lower in the valleys. Each shoreline represents an extended period during which the lake stood at that elevation.

The four main terraces, their elevations, and the ages of their formation are given below.

### MAJOR SHORELINES OF LAKE BONNEVILLE AND THE EARLY GREAT SALT LAKE

SHORELINE NAME	ELEVATION*** AT ANTELOPE ISLAND	APPROXIMATE AGE IN CALENDAR YEARS BEFORE PRESENT
Gilbert*	4,275	12,800 – 11,600
Provo**	4,840	16,800 – 16,200
Bonneville**	5,220	18,000 – 16,800
Stansbury**	4,445	24,400 – 23,200

\* Great Salt Lake shoreline

\*\* Lake Bonneville shoreline

\*\*\*Feet above mean sea level

## What kinds of animals lived in and around Lake Bonneville?

Fish lived in Lake Bonneville; amphibians, waterfowl, and other birds inhabited its marshes; and animals such as buffalo, horses, bears,

# Lake Bonneville

From Wikipedia, the free encyclopedia

*For the reservoir known as Lake Bonneville on the Columbia River, see Bonneville Dam.*

**Lake Bonneville** was a prehistoric pluvial lake that covered much of the eastern part of North America's Great Basin region. Most of the territory it covered was in present-day Utah, though parts of the lake extended into present-day Idaho and Nevada. (Its counterpart Lake Lahontan occupied much of northwestern Nevada while extending into California and Oregon.) Formed about 32,000 years ago, Lake Bonneville existed until about 14,500 years ago, when a large portion of the lake was released through the Red Rock Pass in Idaho. Following the Bonneville Flood, as the release is now known, the lake receded to a level called the Provo Level. Many of the unique geological characteristics of the Great Basin are due to the effects of the lake.

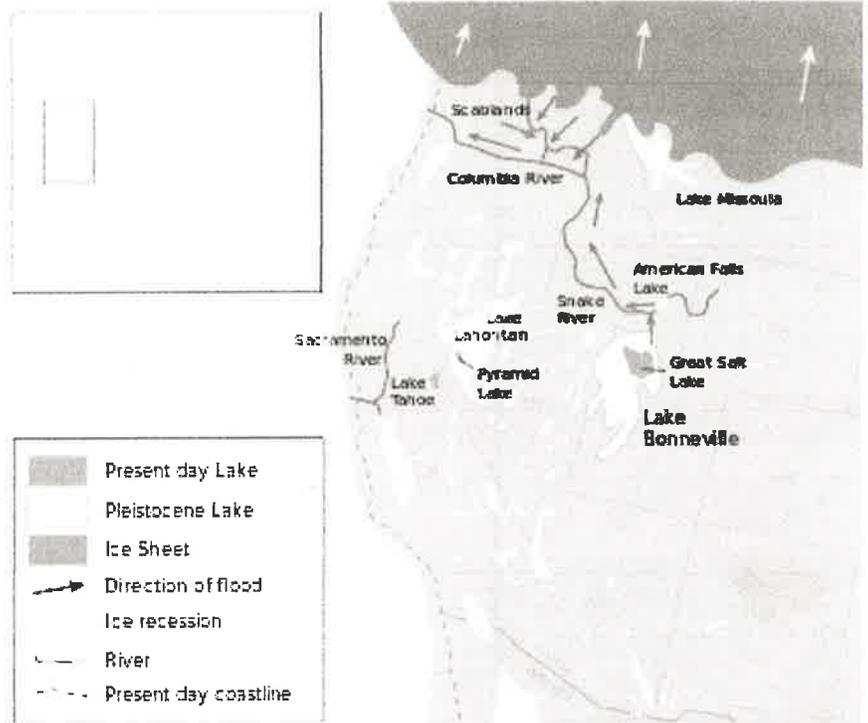
At more than 1,000 ft (300 m) deep<sup>[1]</sup> and more than 19,691 square miles (51,000 km<sup>2</sup>)<sup>[2]</sup> in area, the lake was nearly as large as Lake Michigan and significantly deeper.<sup>[3]</sup> With the change in climate, the lake began drying up, leaving Great Salt Lake, Utah Lake, Sevier Lake, Rush Lake, and Little Salt Lake as remnants.<sup>[3]</sup>

Lake Bonneville was named by the geologist G. K. Gilbert<sup>[4]</sup> after Benjamin Louis Eulalie de Bonneville (1796–1878), a French-born officer in the United States Army, who was also a fur trapper, and explorer in the American West. Bonneville was noted for his expeditions to the Oregon Country and the Great Basin.

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## Geologic history



Lake Bonneville and other ice age pluvial lakes (17,500 years before the present), and modern remnants

Like most, if not all, of the ice age pluvial lakes of the American West, Lake Bonneville was a result of the combination of lower temperatures, decreased evaporation, and higher precipitation that then prevailed in the region, perhaps because of a more southerly jet stream than today's.<sup>[5]</sup> The lake was probably not a singular entity either; geologic evidence suggests that it may have evaporated and reformed as many as 28 times in the last 800,000 years.<sup>[6]</sup>

Great Salt Lake, Utah Lake, and Sevier Lake are the largest remnants of the original Lake Bonneville. Several levels of the old shorelines are still visible above Salt Lake City, along the Wasatch Front and elsewhere. The appearance of the shorelines is that of a shelf or bench protruding from the mountainside, well above the valley floor. Four main shorelines are associated with the fluctuating levels of the ancient lake. The Stansbury, Bonneville, Provo and Gilbert shorelines each mark a time when lake level remained constant long enough to deposit massive accumulations of sand and gravel.

The Bonneville Bench, at about 5,102 feet (1,555 m) above sea level, is part of the preserved ice age shoreline. This shoreline marks the highest level attained by the Pleistocene lake approximately 15,500 years ago. During this period, the lake covered over 20,000 sq mi (52,000 km<sup>2</sup>) and was over 980 ft (300 m) deep in places.

About 14,500 years ago, the lake level fell catastrophically as Lake Bonneville overflowed near Red Rock Pass, Idaho and washed away a natural dam formed by opposing overlapping alluvial fans. The lake level fell some 344 ft (105 m) to what is now the next lower bench (the "Provo level") in a flood that geologists estimate to have lasted up to a year. It is estimated that this breach released 1,000 cubic miles (4,200 km<sup>3</sup>) of water in the first few weeks. The Provo level is the most easily recognized shoreline feature throughout the Bonneville basin and is distinguished by thick accumulations of tufa that formed near the shorelines during the 500 years that the lake was at this level. During this period, the Red Rock Pass contained a river carrying water overflowing out of Lake Bonneville into the Snake River.

About 14,000 years ago, the lake started to drop again because of changing climate conditions, and by 12,000 years ago, the lake reached a level even lower than that of the modern day Great Salt Lake. A slight transgression or rise in lake level occurred about 10,900 to 10,300 years ago and formed the Gilbert shoreline. The Gilbert shoreline is the least conspicuous of the major shorelines but evidence of it remains at Antelope Island and in large coastal features, such as the Fingerpoint Spit near the Hogup Mountains.



Wave-cut platforms from Lake Bonneville preserved on Antelope Island, Great Salt Lake, Utah.

In addition to geological traces, the lake has left a legacy of related fish distributed in now-isolated bodies of water. The term "Lake Bonneville drainage" is often used to refer to the assembly of disconnected lakes and rivers; since the draining happened relatively recently, most of the fish have not had time to evolve into distinct species.

## See also

- List of prehistoric lakes
- Lake Lahontan
- Bonneville cutthroat trout: endemic to area formerly covered by Lake Bonneville
- Bonneville Salt Flats

## References

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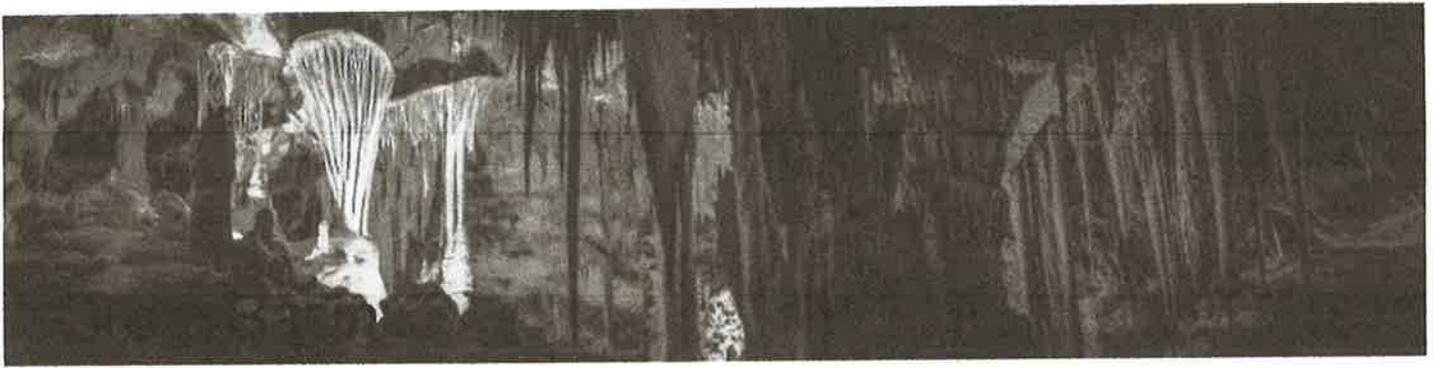
## External links

- Brigham Young University - Geology ([http://geologyindy.byu.edu/faculty/rah/slides/Rock%20Canyon/Lake%20Bonneville/paleo\\_map.htm](http://geologyindy.byu.edu/faculty/rah/slides/Rock%20Canyon/Lake%20Bonneville/paleo_map.htm)) - maps of Lake Bonneville
- Utah Geologic Survey (<http://geology.utah.gov/utahgeo/gsl/index.htm#bonneville>)- maps of Lake Bonneville

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Categories: Glacial lakes of the United States Shrunken lakes Endorheic lakes of Utah Geology of Utah Geology of Idaho Geology of Nevada Natural history of Utah Natural history of Idaho Natural history of Nevada Lakes of the Great Basin Former lakes Pleistocene Megafloods

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**National Park** | Nevada

## Rivers and Streams

Ten permanent streams originate in Great Basin National Park between 6,200 and 11,000 ft. (1,890 and 3,353 m) elevation and are fed by numerous springs along their courses. The streams are first and second order headwater streams with an average length of 8 km (5 mi) within the park.

### Great Basin's Streams

Six streams (Strawberry, Mill, Lehman, Baker, Snake, and South Fork Big Wash) flow eastward into Snake Valley and the Bonneville Basin. The other four streams (Shingle, Pine, Ridge, and Williams) flow westward into Spring Valley and were originally fishless. Outside park boundaries the majority of these streams are used for irrigation; some water evaporates or percolates into the alluvium before reaching the valley bottom. None of the water flows outside of the **Great Basin** (<http://www.nps.gov/grba/planyourvisit/the-great-basin.htm>) hydrologic basin.

### Stream Life

The variety of habitat types in Snake Range streams supports a diverse spectrum of aquatic insects and invertebrates. Over 100 species of aquatic insects live in the streams. Mayflies, caddisflies, stoneflies, as well as scuds, leeches, and snails are all prominent food sources for resident fish. Bonneville cutthroat trout and three other native **fish** (<http://www.nps.gov/grba/naturescience/fish.htm>) species are found in park streams, along with some nonnative species.

### Seasonal Flow

The amount of water in the creeks varies widely. Baker Creek may only have 1.5 cubic feet per second (cfs) flowing in the winter, but during spring runoff it can exceed 200 cfs. In order to measure the streamflow, Baker and Lehman Creeks have been instrumented with United States Geological Survey (USGS) stream gauges for over 13 years.

## Research

Stream gauges were installed by the USGS in 2002 for two years on Strawberry, Snake, South Fork Big Wash, Shingle, Decathon, and Williams Creeks as part of a study to determine the susceptibility of park water resources to groundwater pumping in adjacent valleys (Elliott et al 2006). Gauges are currently being monitored on Lehman Creek by the USGS; and Baker, Rowland, and Snake at the park boundary by park staff. Some of the data can be accessed at: <http://waterdata.usgs.gov/nv/nwis> (<http://waterdata.usgs.gov/nv/nwis>).

A number of studies are underway on the streams in the park. These include annual monitoring of fish populations, a baseline water quality inventory, maintaining and operating stream gauges, and periodically monitoring of macroinvertebrates, physical habitat, and riparian vegetation.

*Reference:* Elliott, P.E., D.A. Beck, and D.A. Prudic. 2006. Characterization of surface-water resources in the Great Basin National Park area and their susceptibility to ground-water withdrawals in adjacent valleys, White Pine County, Nevada: U. S. Geological Survey Scientific Investigations Report 2006-5099. 156 p. Available at URL: <http://pubs.water.usgs.gov/sir2006-5099> (<http://pubs.water.usgs.gov/sir2006-5099>).

*Gretchen M. Baker, April 2007*

# Prometheus (tree)

From Wikipedia, the free encyclopedia

**Prometheus** (recorded as **WPN-114**) was the oldest known non-clonal organism, a Great Basin bristlecone pine (*Pinus longaeva*) tree growing near the tree line on Wheeler Peak in eastern Nevada, United States. The tree, which was at least 4862 years old and possibly more than 5000, was cut down in 1964 by a graduate student and United States Forest Service personnel for research purposes.<sup>[1]</sup> The people involved did not know of its world-record age before the cutting (see below), but the circumstances and decision-making process remain controversial; not all the facts are agreed upon by all involved.

The tree's name refers to the mythological figure Prometheus, who stole fire from the gods and gave it to man.<sup>[2]</sup> The designation WPN-114 was given by the original researcher, Donald Rusk Currey, and means it was the 114th tree he sampled in his research in Nevada's White Pine County.



The stump (lower left) and some remains of the Prometheus tree (center), in the Wheeler Bristlecone Pine Grove at Great Basin National Park near Baker, Nevada

## Contents

- 1 About the tree
- 2 The cutting of the tree
- 3 Repercussions
- 4 Contemporary References
- 5 See also
- 6 Notes
- 7 References

## About the tree

Prometheus was a living member of a population of bristlecone pine trees near the tree line on the lateral moraine of a former glacier on Wheeler Peak, in Great Basin National Park, eastern Nevada. Wheeler Peak is the highest mountain in the Snake Range, and the highest mountain entirely in the state of Nevada. The bristlecone pine population on this mountain is divided into at least two distinct sub-populations, one of which is accessible by a popular interpretive trail.

Prometheus, however, grew in an area reachable only by off-trail hiking. In either 1958 or 1961, a group of naturalists who admired Prometheus's grove gave names to a number of the largest or most distinctive trees, including Prometheus.<sup>[3]</sup>



The grove in which Prometheus grew, with the headwall of Wheeler Peak in the distance

Currey originally estimated the tree was at least 4844 years old. A few years later, this was increased to 4862 by Donald Graybill of the University of Arizona's Laboratory of Tree-Ring Research. These ring counts were done on a trunk cross-section taken about 2.5 m (8 feet) above the original germination point of the tree, because the innermost rings were missing below that point. Adjusting Graybill's figure by adding the estimated number of years required to reach that height, plus a correction for the estimated number of missing rings (not uncommon in trees at the tree line), it is probable that the tree was at least 5000 years old when felled. That made it the oldest known unitary (i.e. non-clonal) organism at the time, exceeding even the Methuselah tree of the White Mountains' Schulman Grove, in California, though Methuselah was later redated to 4845 years

old.<sup>[4]</sup>

In 2012 a bristlecone pine in California's White Mountains was measured by Tom Harlan to be 5062 years old,<sup>[4]</sup> making it the oldest known tree in North America and the oldest known individual tree in the world.

Whether Prometheus should have been considered the oldest organism ever known depends on the definition of "oldest" and "organism". Certain sprouting (clonal) organisms, such as creosote bush or aspen, may have older individuals if the entire clonal organism is considered.<sup>[5]</sup> By that standard, the oldest living organism is a grove of quaking aspens in Utah known as Pando, at perhaps as much as 80,000 years old. In a clonal organism, however, the individual clonal stems are not nearly so old, and no part of the organism is particularly old at any given time. Until 2012, Prometheus was thus the oldest *non-clonal* organism yet discovered, with its innermost, extant rings exceeding 4862 years of age.

## The cutting of the tree

In the 1950s dendrochronologists were making active efforts to find the oldest living tree species in order to use the analysis of the rings for various research purposes, such as the evaluation of former climates, the dating of archaeological ruins, and addressing the basic scientific question of maximum potential lifespan. Bristlecone pines in California's White Mountains and elsewhere were discovered by Edmund Schulman to be older than any species yet discovered. This spurred interest in finding very old bristlecones, possibly older than the Methuselah tree, aged by Schulman in 1957 at over 4700 years.



The cut stump of the Prometheus tree

Donald R. Currey was a graduate student at the University of North Carolina at Chapel Hill studying the climate dynamics of the Little Ice Age using dendrochronology techniques. In 1963 he became aware of the bristlecone populations in the Snake Range in general, and on Wheeler Peak in particular. Based on the trees' size, growth rate and growth forms, he became convinced that some were very old, cored some of them, and found trees exceeding 3,000 years old, but Currey was not able to obtain a continuous series of overlapping cores from WPN-114.

- King Clone
- King's Lomatia
- Llangernyw Yew
- Old Tjikko

## Notes

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Categories: Great Basin National Park Individual conifers Trees of the Southwestern United States  
Trees of the Great Basin 1960s individual tree deaths Prometheus  
Individual trees in the United States

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# Pishon

From Wikipedia, the free encyclopedia

The **Pishon** or **Pison**<sup>[1]</sup> (Hebrew: פִּישׁוֹן *Piṣhōn*) is one of four rivers (along with Hiddekel (Tigris), Phrath (Euphrates) and Gihon) mentioned in the Biblical Book of Genesis. In that passage, these rivers are described as arising within the Garden of Eden. The Pishon is described as encircling "the entire land of Havilah."<sup>[2]</sup>

## Identification

Unlike the Tigris and the Euphrates, the Pishon has never been clearly located. It is briefly mentioned together with the Tigris in the Wisdom of Sirach (24:25), but this reference throws no more light on the location of the river. The Jewish-Roman historian Flavius Josephus, in the beginning of his *Antiquities of the Jews* (1st century AD) identified the Pishon with the Ganges. The medieval French rabbi Rashi identified it with the Nile.



Picture of mosaic representing Pishon from Church of Theodorias (Qasr Libya) ca 539 CE.

Some early modern scholars, including A.D. Calumet (1672–1757), Rosenmüller (1768–1835), and Kell (1807–1888), believed the source river [for Eden] was a region of springs: "The Pishon and Gihon were mountain streams. The former may have been the Phasis or Araxes, and the latter the Oxus."<sup>[3]</sup> James A. Sauer, former curator of the Harvard Semitic Museum, made an argument from geology and history that Pishon referred to what is now the Wadi Bisha, a dry channel which begins in the Hijaz Mountains near Medina to run northeast to Kuwait.<sup>[4]</sup> With the aid of satellite photos, Farouk El-Baz of Boston University traced the dry channel from Kuwait up the Wadi Al-Batin and the Wadi Al-Rummah system originating near Medina.<sup>[5]</sup>

David Rohl identified Pishon with the Uizhun, placing Havilah to the northeast of Mesopotamia. The Uizhun is known locally as the Golden River. Rising near Mt. Sahand, it meanders between ancient gold mines and lodes of lapis lazuli before feeding the Caspian Sea. Such natural resources correspond to the ones associated with the land of Havilah in Genesis.

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Categories: Torah places Bereshit (parsha)

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# Havilah

From Wikipedia, the free encyclopedia

*For the small town in the United States, see Havilah, California. For the album by the Drones, see Havilah (album). For the village in Iran, see Havilah, Iran.*

**Havilah** (Hebrew: חַוִּילָה *Hāvīlāh*, "Circular";<sup>[1]</sup> also spelled **Evilas**, **Evilath** via LXX) is in several books of the Bible referring to both land and people.

The story of the Garden of Eden in Genesis 2:11:

And a river went out of Eden to water the garden; and from thence it was parted, and became into four heads. The name of the first is Pishon: that is it which compasseth the whole land of Havilah, where there is gold; And the gold of that land is good: there is bdellium (a resin similar to myrrh) and the onyx stone.

In addition to the region described in Genesis 2, two individuals named Havilah are listed in the Table of Nations which lists the descendants of Noah, who are considered eponymous ancestors of nations. They are mentioned in Genesis 10:7,29, 1 Chronicles 1:9,23. One is the son of Cush, the son of Ham; the other, a son of Joktan and descendant of Shem.<sup>[2]</sup> The other sons of Cush are associated with the Horn of Africa, while Joktan's other sons are often associated with the Arabian desert. Such a land in the Arabian desert is mentioned in Genesis 25:18, where it defines the territory inhabited by the Ishmaelites as being "from Havilah to Shur, opposite Egypt in the direction of Assyria"; and in 1 Samuel 15:7, which states that king Saul of Israel attacked the Amalekites who were living there.<sup>[3]</sup>

In extra-biblical literature, the land of Havilah is mentioned in Pseudo-Philo as the source of the precious jewels that the Amorites used in fashioning their idols in the days after Joshua, when Kenaz was judge over the Israelites.

An extra-biblical tradition found in the *Kitab al-Magall* (Clementine literature) and the *Cave of Treasures* holds that in the early days after the Tower of Babylon, the children of Havilah, son of Joktan built a city and kingdom, which was near to those of his brothers, Sheba and Ophir.

The region in Genesis is usually associated with either the Arabian Peninsula or north-west Yemen, but in the work associated with the Garden of Eden by Juris Zarins, the Hijaz mountains appear to satisfactorily meet the description. The Hejaz includes both the Cradle of Gold at Mahd adh Dhahab (23°30'12.96"N 40°51'34.92"E) and a possible source of the "Pishon River" — a biblical name that has been speculated to refer to a now dried-out river formerly flowing 600 miles (970 km) northeast to the Persian Gulf via the Wadi Al-Batin system. Archaeological research led by Farouk El-Baz of Boston University indicates that the river system, now prospectively known as the Kuwait River, was active 2500–3000 BC.<sup>[4]</sup> Bdellium plants are also abundant in the Hijaz.

## References and external links

- Strong's Exhaustive Concordance of the Bible, entry 2341.
- Genesis 10:7,29 1 Chronicles 1:9,23* (<http://www.biblegateway.com/passage/>)

## THE DEAD SEA IN THE BIBLE

**The Primordial Sea, the Plains Sea, the Salt Sea – these are but a few of the names of the Dead Sea, which features in narratives throughout religious history. Below is an overview of the sources where the Dead Sea and the Jordan Valley are mentioned and the historical events that took place there.**

The Dead Sea has served as the backdrop to some unforgettable events on the world's stage of history: the patriarch Abraham fought a war there, David hid there from King Saul, the prophet Ezekiel had visions there, the story of Masada happened nearby, and Jesus was baptized there by John the Baptist.

### The War of the Four Kings Against the Five

The book of Genesis refers to a war conducted by four kings against five at the Dead Sea: "All these were joined together in the vale of Siddim, which is the salt sea" (Genesis 14:3; all Biblical citations on this page refer to the King James Version). In the course of this war, Lot, Abraham's nephew, was taken captive. Abraham, whose name was still Abram at this point, went out to pursue the captors and bring Lot home.

The phrases "Valley of Siddim" or "Siddim Sea" come from the root s.i.d., which means clay, tar or pitch, materials that are typical of the Dead Valley region. The book of Genesis also notes that two of the kings fell into the pits typical of the area during the war: "And the vale of Siddim was full of slime pits [tar pits]; and the kings of Sodom and Gomorrah fled, and fell there; and they that remained fled to the mountain" (Genesis 14:10).

### David Hides from King Saul

Many years after Abraham fought in the area, David, who would later be king of Israel, fled there from King Saul: "And David went up from thence, and dwelt in strong holds at Ein Gedi" (I Samuel 23:29). This area was also where the cave incident took place: David entered a cave where King Saul was sleeping and cut off the corner of his outer garment, thereby proving that he had no intention of harming his king.

### The Prophet Elijah and Jesus' Baptism

Elijah, one of the prominent prophets in Judaism and a religiously significant figure in Islam and Christianity as well, parted from his disciple Elisha and ascended to heaven in a chariot of fire drawn by horses of fire: "And Elijah said unto him, Tarry, I pray thee, here; for the Lord hath sent me to Jordan. And he said, As the Lord liveth, and as thy soul liveth, I will not leave thee. And they two went on (II Kings 2:6).

The spot where Elijah ascended to heaven in a whirlwind would later be considered by the Christian tradition to be the spot where John baptized Jesus. Today, the location is known as Kasr Al-Yahud: "These things were done in Bethabara beyond Jordan, where John was baptizing" (The Gospel of John 1:28).

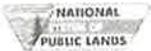
### Biblical Names of the Dead Sea

The Dead Sea goes by many different names in the Bible:

- In the book of Genesis, the Dead Sea is called the Vale of Siddim: "All these were joined together in the Vale of Siddim, which is the Salt Sea" (Genesis 14:3).
- In the book of Joshua, the Dead Sea is called the Plains Sea: "That the waters which came down from above stood and rose up upon an heap very far from the city Adam, that is beside Zaretan: and those that came down toward the Sea of the Plain, even the Salt Sea, failed, and were cut off: and the people passed over right against Jericho" (Joshua 3:16).
- The book of Zechariah refers to the location as the Former Sea (i.e., meaning "early"; the Hebrew root q.d.m. means "early" or "before" and thus also refers, spatially, to the east, where the sun rises. Therefore, the phrase "Former Sea" indicates that the Dead Sea is located in the eastern part of the land of Israel): "And it shall be in that day, that living waters shall go out from Jerusalem; half of them toward the Former Sea, and half of them toward the hinder sea: in summer and in winter shall it be" (Zechariah 14:8).

Non-biblical sources refer to the sea as the Dead Sea because the water cannot sustain marine life, though it is host to several types of algae and bacteria.

In the course of human history, many different sects sought refuge at the Dead Sea. These included the Qumran sect, considered to be the descendants of the First Temple priest Tzadok, and the Sicarii, the group of Jewish rebels who committed suicide on Masada, thus giving birth to the Masada myth. In modern times, a Bedouin tribe discovered the Qumran scrolls here



Release Date: 05/12/14

Contacts: Megan Crandall, 801-539-4020

## BLM Seeks Public Comment on Proposed Energy Route

**Vernal, Utah**—The Bureau of Land Management Vernal Field Office is seeking comments during a 30-day comment period for a proposal to construct the Ashley Valley Energy Route approximately five miles south of Vernal, Utah.

Uintah County has filed a right-of-way application seeking authorization to build a new roadway in a 300-foot wide right-of-way that would extend from US 40 at the McCoy Flat area along 6500 South to US 40 south of Naples. The proposed route crosses 3.16 miles of BLM-administered land, 5.2 miles of School and Institutional Trust lands, and 3.9 miles of private land. This roadway would accommodate heavy commercial traffic volumes which are expected to increase with the growth of the oil and gas industry. A map and newsletter summarizing the project are located at: [https://www.blm.gov/epl-front-office/eplanning/nepa/nepa\\_register.do](https://www.blm.gov/epl-front-office/eplanning/nepa/nepa_register.do).

In conjunction with the scoping period, a public scoping open house will be held on June 5, 2014 from 6 to 8 p.m. at the Vernal City Building Community Room. Representatives from the BLM and the proponent will be present during the meeting to talk face-to-face with members of the public, listen to any concerns, and answer questions about the project. The format of the meeting will be "open house" (come at any time, no formal presentation, no open microphone).

The BLM encourages the public to provide written comments on specific issues and concerns regarding the proposal. Written comments will help determine the issues to be addressed in the Environmental Assessment. All comments will be carefully reviewed and considered and become part of the official record. Please reference "Ashley Valley Energy Route" when submitting comments.

Written comments must be submitted by June 12, 2014, by any of the following methods:

- In person at the scoping meeting or the Vernal BLM Field Office
- U.S. Mail:  
Vernal Field Office, BLM  
ATTN: Stephanie Howard  
170 South 500 East Vernal, Utah 84078
- E-mail: [blm\\_ut\\_vernal\\_comments@blm.gov](mailto:blm_ut_vernal_comments@blm.gov)
- Project website:  
[https://www.blm.gov/epl-front-office/eplanning/nepa/nepa\\_register.do](https://www.blm.gov/epl-front-office/eplanning/nepa/nepa_register.do)

To submit a comment on the above webpage, choose the "Advanced Search" hyperlink, and in the "Project Name" field type in "Ashley Valley Energy Route." Open the project website and click on the "Comment on Document" button. A newsletter summarizing the project and a map can also be found on this website.

Before including an address, phone number, email address, or other personal identifying information in any comments, be aware that the entire comment—including personal identifying information—may be made publicly available at any time. Requests to withhold personal identifying information from public review can be submitted, but the BLM cannot guarantee that it will be able to do so. The BLM will not consider anonymous comments. All submissions from organizations and businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, will be available for public inspection in their entirety.

For additional project-specific information, please contact Stephanie Howard at (435)781-4469. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1-800-877-8339 to leave a message or question with the above individual. The FIRS is available 24 hours a day, seven days a week. Replies are sent during normal business hours.

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The BLM manages more than 245 million acres of public land, the most of any Federal agency. This land, known as the National System of Public Lands, is primarily located in 12 Western states, including Alaska. The BLM also administers 700 million acres of sub-surface mineral estate throughout the nation. The BLM's mission is to manage and conserve the public lands for the use and enjoyment of present and future generations under our mandate of multiple-use and sustained yield. In Fiscal Year 2014, the BLM generated \$5.2 billion in receipts from public lands.

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\* The BLM needs to get out of real-estate and focus on something more important. This is crazy time.

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## CLIMATE

# Utah Officials Give Canadian Company The Go-Ahead To Expand Tar Sands Mine

BY [KATIE VALENTINE](#) JUL 21, 2015 1:59PM

*This July 13, 2015, photo, shows construction at the U.S. Oil Sands commercial tar sands operation, in the Book Cliffs, in eastern Utah. Utah state officials have given the go-ahead for the mine under construction the eastern flank of the state, but they will require the company to do water and air quality monitoring in a move environmentalists are calling a victory.*

Utah officials have given a tar sands company the green light to continue constructing a tar sands mine in the eastern part of the state.

The Utah tar sands operation had already been approved for construction, but the company, U.S. Oil Sands, recently submitted another plan to expand the operation. The Utah Division of Oil, Gas, and Mining approved this new plan, but did so on the condition that the company come up with a plan to monitor air and water quality — an order environmentalists opposed to the mine are hailing as a victory. *- A plan is nothing if the people are bad.*

"This is a big deal and it's a step in the right direction," Rob Dubuc, an attorney for Living Rivers, an organization that has protested the mine, told the AP. "To expect [the Division of Oil, Gas and Mining] to deny the permit is not realistic in this political environment. But at least they are doing the right thing by requiring the monitoring."

Environmentalists in Utah have long opposed the mine, saying they are worried about the effects a tar sands operation will have on local air and water. In July of last year, 21 activists were arrested after they chained themselves to fences and equipment at the mine site. The group Tar Sands Resistance has been fighting the mine since 2012, organizing multiple protests and vigils near the mine site.

U.S. Oil Sands — which is based out of Calgary, Alberta — and the state of Utah have argued that there would be little risk to water contamination from the mine, since the operation doesn't have any connection to a groundwater source. The Utah Department of Environmental Quality has conducted studies that back up these claims. *-fun lets get an unbiased 2nd opinion.*

But University of Utah Geology Professor Bill Johnson maintains that the mine would pose a pollution risk. Johnson said last month that a study he conducted on the vulnerability of water sources near the mine does point to a threat from the operation.

"Unfortunately, every decision that has been made to date is the (same) as looking out at the sky today and saying it is impossible that water can fall from the sky, and I find that infuriating," he said at a hearing about the project last month. "The conclusions are based on data that was never intended to find a hydrological resource."

This potential risk to water sources is why environmentalists in the state have praised officials' decision to mandate that U.S. Oil Sands monitor air and water quality near the mine site. Dubuc told the AP that this monitoring will help prove whether or not worries about contamination were warranted. U.S. Oil Sands says it plans to comply with the monitoring mandate.

Tar sands mining is prevalent in Canada, but this Utah operation is among the first of its kind for the United States. According to U.S. Oil Sands, there are more than 50 tar sands deposits in Utah, which contain a total of 20 to 32 billion barrels of tar sands crude. And Utah might not be the last state to get into the tar sands mining business: in 2013, the governors of Mississippi and Alabama signed a Memorandum of Understanding that agreed to study tar sands resources in the states. The states haven't done any actual tar sands development yet, but residents and environmentalists remain worried that they could one day start.

Tar sands, as a fuel, has long been criticized by environmentalists because mining it is particularly carbon-intensive. In Canada, creating tar sands mining operations means cutting down vast swaths of boreal forest. It's been labeled as one of the dirtiest types of liquid fuel, with an extraction process that's water-intensive and creates toxic holding ponds that kill birds that land on them. U.S. Oil Sands, however, maintains that its extraction process for tar sands in Utah is less environmentally damaging than the processes used in Canada. It involves a use of a citrus solvent — rather than a hydrocarbon solvent, as is used in most tar sands operations — to reduce the tar sands' viscosity.

Still, extraction isn't the only thing aspect of tar sands that poses a risk to the environment. Transporting tar sands around the U.S. and Canada is also risky — in 2010, for instance, a tar sands pipeline owned by Canadian oil company Enbridge spilled more than 800,000 gallons of tar sands crude into Michigan's Kalamazoo River, a disaster that stands as the largest inland oil spill in U.S. history. This risk of a major spill is one of the main reasons so many environmental activists are opposed to the Keystone XL pipeline, which would ship tar sands crude from Alberta to Texas.

**UPDATE** JUL 22, 2015 1:23 PM

A previous version of this story called the U.S. Oil Sands mine the first of its kind in the U.S. In fact, Utah already has a tar sands mine, operated by MCW Energy Group, that went into operation in October 2014. ThinkProgress regrets the error.

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# BLM seeks comment on proposed road near Vernal

Published: Friday, Aug. 7 2015 3:30 p.m. MDT  
Updated: Friday, Aug. 7 2015 4:34 p.m. MDT

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*this is also crazy.*

### Summary

The Bureau of Land Management is seeking public comment on the proposed Ashley Valley Energy Route roadway project five miles south of Vernal.

VERNAL — The Bureau of Land Management is seeking public comment on the proposed Ashley Valley energy route roadway project 5 miles south of Vernal. Uintah County has filed a right-of-way application seeking authorization to build a new roadway that would extend from U.S. 40 at the McCoy Flat area along 6500 South to U.S. 40 south of Naples.

The proposed route crosses more than 3 miles of BLM lands, 5.2 miles of School and Institutional Trust lands, and 3.9 miles of private land. The road would accommodate heavy commercial traffic, which is expected to increase with oil and gas industry growth.

The assessment is available for review and comment at blm.gov.

An open house will be held from 6 to 8 p.m. Friday at the Uintah Basin Applied Technology Center in Vernal. Representatives from the BLM and the county will provide information and answer questions.

\* Written comments will be accepted until Aug. 26. Send mail to BLM-Utah Vernal Field Office, Stephanie Howard, 170 S. 500 East, Vernal, UT 84078. Email [blm\\_ut\\_vernal\\_comments@blm.gov](mailto:blm_ut_vernal_comments@blm.gov).

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# Deseret News

## BLM proposes to open lands near Vernal for tar sands development

By Amy Joi O'Donoghue, Deseret News  
Published: Tuesday, Aug. 26 2015 4:17 p.m. MDT



Mark Ward, senior policy analyst and attorney for the Utah Association of Counties, speaks during a press conference Tuesday, April 24, 2012, about a proposal by the U.S. Bureau of Land Management to reduce the amount of public land it will lease for development of oil shale and tar sands. Thirteen counties in Colorado, Utah and Wyoming expressed their opposition to the BLM's actions. (Geoff Liesik, Geoff Liesik, Deseret News)

VERNAL — Utah is home to an estimated 55 percent of the country's tar sands deposits that are concentrated in eight major areas suspected to hold more than 32 billion barrels of oil, the Department of Energy says.

The Bureau of Land Management is now proposing to make 26,402 tracts of that land at Asphalt Ridge outside of Vernal available for potential development. An environmental analysis has been prepared by the federal agency and is under review until June 13.

*Enough said!*

*BLM - this must be stopped!*

Comments may be mailed to the BLM Vernal Field Office, 170 S. 500 East, Vernal, Utah 84078 or emailed to [BLM\\_UT\\_Vernal\\_Comments@blm.gov](mailto:BLM_UT_Vernal_Comments@blm.gov).

A Canadian company MCW Energy, has already conducted test drilling at Asphalt Ridge under permits it obtained last year and hopes to expand its operation.

The tracts of land proposed for leasing are directly south of an existing tar sands strip mine and processing plant located on private land and adjacent to more than 16,000 acres of existing leases issued by the Utah School and Institutional Trust Lands Administration.

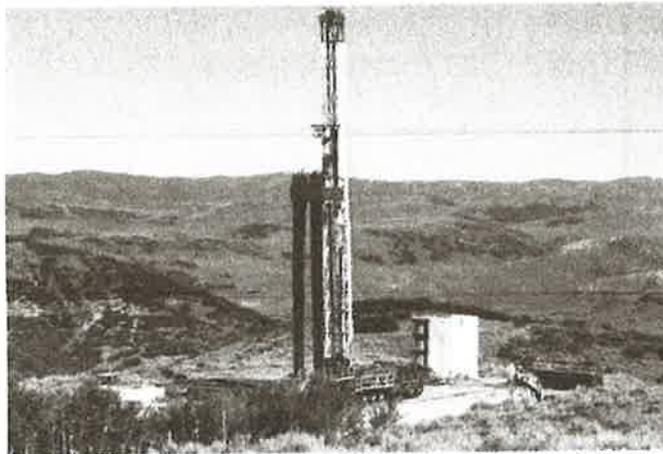
In its details of the project, the BLM noted that there had been a 2009 lawsuit filed against the agency over its decision to lease acreage for four oil and tar sands projects. A settlement agreement reached two years ago specifically allowed the Asphalt Ridge project to be leased. Obtaining the leases does not mean

any tar sands mining will take place because a separate review will be required in the federal permitting process.

In the case of MCW Energy, the company already hired Cedar City-based environmental consultants to conduct an analysis of impacts and its test site that include protection of water and air resources.

Winter-time ozone is a problem that plagues that Uintah Basin and isn't uncommon in other oil and gas producing regions such as areas of Wyoming. The BLM said it will require pollution controls be instituted once the successful bidding company submits its site specific development plans.

Other impacts that would have to be addressed include possible disturbance of golden eagle nesting sites and sage grouse populations, including one active breeding site called a lek.



A recent plan put forth by the Department of the Interior regarding potential leases for oil shale and tar sands development on Bureau of Land Management lands goes a long way to protect Utah's outdoor recreation economy. (Lisha Cordova, Division of Oil, Gas and Mining.)



FILE - This June 25, 2008 photo shows an aerial view just north of Fort McMurray in Alberta, Canada, where the world's largest oil companies are building massive open pit mines to get at the oil sands. A proposed tar sands mine on Utah's eastern Uinta basin, that would be the first commercial project of its kind in the U.S. has environmentalists concerned that shortsightedness may trump reason. A Canadian company aims to mine roughly 62 acres on the Uinta basin to produce bitumen, a tar-like form of petroleum, from oil-saturated sands. For decades, other Utah operators have used oil sands as a poor-man's asphalt, and Canada has been wringing oil from the dirt for years, but nobody has yet tried to produce petroleum from U.S. soil on such a large scale. (Canadian Press, Eamon Mac Mahon, File) \*\* NO ARCHIVE \*\*, Associated Press)

The project will be developed in two stages, the first of which is a 540-acre strip mine and then an underground mine once those resources are exhausted.

In April, the U.S. Department of Energy announced that a project it funded resulted in the development of new technology by a Salt Lake City company, Ceramatec, that should make processing costs more economically feasible.

The technology, the agency said, has the potential to unlock the vast tar sands deposits in the Green River Formation.

The U.S. Department of Energy said there are nearly a billion barrels of oil contained at Asphalt Ridge.

Paul Davey, a spokesman with MCW Enterprises, said the company anticipates being able to start production near the end of July, with a modest startup target of 250 barrels of oil a day.



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